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R E P O R T

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# Assessing Living Conditions in Iraq's Anbar Province in 2009

Audra K. Grant, Martin C. Libicki

Prepared for the Marine Corps Intelligence Activity

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## Preface

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The local population is the center of gravity in counterinsurgency, and the first step toward winning over the population is to understand it. To this end, the RAND Corporation, in spring 2008 and spring 2009, conducted a survey of Iraq's Anbar Province by putting a detailed set of questions to 1,200 randomly selected households. The survey was designed to collect a wide variety of data—ranging from demographics and housing to employment and living standards—about Anbari households and the province's citizens. This report summarizes the key results of the 2009 survey and includes comparisons, as appropriate, to the 2008 phase of the project.<sup>1</sup>

Al-Anbar has been surveyed before, notably in 2004, when the Iraqi government, with cooperation from the United Nations Development Programme (UNDP) and Fafo-AIS, carried out a countrywide survey, reporting results in 2005 on a province-by-province basis. RAND's survey project built on this previous effort and, although this report focuses on more-current conditions, it does offer comparisons to the situation described in 2004.

This research was sponsored by the Marine Corps Intelligence Activity and conducted within the Intelligence Policy Center of the RAND National Defense Research Institute, a federally funded research and development center sponsored by the Office of the Secretary of Defense, the Joint Staff, the Unified Combatant Commands, the Navy, the Marine Corps, the defense agencies, and the defense Intelligence Community.

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<sup>1</sup> The 2008 results can be found in Keith Crane, Martin C. Libicki, Audra K. Grant, James B. Bruce, Omar Al-Shahery, Alireza Nader, and Suzanne Perry, *Living Conditions in Anbar Province in June 2008*, Santa Monica, Calif.: RAND Corporation, TR-715-MCIA, 2009.



# Contents

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<b>Preface</b> .....	iii
<b>Figures</b> .....	vii
<b>Tables</b> .....	ix
<b>Summary</b> .....	xi
<b>Acknowledgments</b> .....	xv
<b>Abbreviations</b> .....	xvii
 <b>CHAPTER ONE</b>	
<b>Introduction and Methodology</b> .....	1
Methodology .....	2
Comparing the 2008 and 2009 Surveys: Learning from Past Experience .....	5
Factors Influencing the Environment .....	5
 <b>CHAPTER TWO</b>	
<b>The Security Situation and the Effects of War</b> .....	7
Perceptions of Security .....	7
The Effects of War .....	11
Summary .....	14
 <b>CHAPTER THREE</b>	
<b>Public Infrastructure</b> .....	15
Utilities .....	15
Health Services .....	17
Summary .....	23
 <b>CHAPTER FOUR</b>	
<b>Demographics</b> .....	25
Family Size .....	25
Distribution by Age .....	26
Distribution by Gender .....	27
Extended Families and Households .....	28
Children .....	30
Marriage .....	30
Summary .....	36



CHAPTER FIVE

<b>Employment</b> .....	37
Summary .....	46

CHAPTER SIX

<b>Income and Standards of Living</b> .....	47
Income .....	48
Standards of Living .....	55
Summary .....	59

CHAPTER SEVEN

<b>Education</b> .....	63
Literacy .....	63
Summary .....	67

CHAPTER EIGHT

<b>Housing</b> .....	71
Survey Results .....	71
Summary .....	73

CHAPTER NINE

<b>Conclusion</b> .....	75
Future Research .....	76

APPENDIX

<b>RAND al-Anbar Standard of Living Survey: Year Two (May–June 2009)</b> .....	77
<b>Bibliography</b> .....	115

## Figures

---

2.1.	Who Would You Turn to If Threatened or Victimized by Crime? .....	8
2.2.	Who Threatens Your Neighborhood the Most? .....	9
2.3.	Are U.S. Efforts to Bring Security and Order to Iraq Going Well? .....	9
2.4.	Is the United States Making Significant Progress in Restoring Civil Order in Iraq? .....	10
2.5.	Satisfaction Indexes .....	10
2.6.	Travel Time to Various Destinations .....	11
2.7.	The Destination of Individuals Who Left Households .....	13
2.8.	Prior Location of Households that Moved to al-Anbar After December 2007 .....	13
3.1.	Top Reported Problems in Iraq's Health Care System .....	18
3.2.	Type of Professional Consulted by Households .....	19
3.3.	Source First Consulted for Health Care by Urban and Rural Households .....	19
3.4.	Percentage of Households That Consult Doctors First, by Education Level of Household Head .....	20
3.5.	Ease of Access to Various Forms of Health Care .....	21
3.6.	The Affordability of Health Care .....	22
3.7.	Average Travel Time to Hospitals, Primary Physicians, and Pharmacies .....	22
3.8.	Types of Institution Relied on for Health Care .....	24
3.9.	Sources of Health Care Financing .....	24
4.1.	Distribution of 1,200 Households, by Number of Household Members .....	26
4.2.	Male-to-Female Ratio, by Age and Region .....	29
4.3.	Number of Household Heads, by Age and Gender .....	29
4.4.	Number of Households with Members Who Are Not Part of the Immediate Family .....	31
4.5.	Percentage of Households, by the Age of the Youngest Member .....	31
4.6.	Number of Children, by the Age Difference Between the Child and the Next-Oldest Sibling .....	32
4.7.	Percentage of Children with Living Parents, by the Child's Age .....	32
4.8.	Age at Marriage .....	33
4.9.	Number of Male Heads of Household, by Age Difference Between Husband and Wife .....	34
4.10.	Marital Status of Men, by Age .....	34
4.11.	Marital Status of Women, by Age .....	35
4.12.	Scatter Plot of Current Age and Age at First Marriage Among Men .....	35
5.1.	Percentage of Individuals with a Job in May 2009, by Age .....	38
5.2.	Labor-Force Participation Rates, by Age .....	38
5.3.	Percentage of Individuals with a Job in May 2009, by Age/Age Group and Motherhood Status .....	40
5.4.	Percentage of Households Reporting a Specific Number of Workers .....	40
5.5.	Average Age at Which Individuals First Started to Work, by Age .....	41

5.6.	Number of Unemployed Individuals, by Age .....	41
5.7.	Employment Status of Males Ages 16–23, by Age .....	42
5.8.	Job Types Held by Respondents .....	45
6.1.	Weekly Wages in May 2009 and December 2007, by Age .....	49
6.2.	Increase/Decrease in Wages Between December 2007 and May 2009 .....	49
6.3.	Men's and Women's Weekly Wages in May 2009, by Age .....	50
6.4.	Share of Earnings in May 2009, by Income Type .....	50
6.5.	Share of Earnings in 2008, by Income Type .....	51
6.6.	Percentage of Households That Reported Receiving Money from a Specific Activity.....	52
6.7.	Labor Earnings as a Percentage of Total Income, by Decile.....	52
6.8.	Sources from Which Households Received Food Rations.....	53
6.9.	Growth in Real Income Between 2007 and 2008, by Decile .....	54
6.10.	Income, by Decile, as a Ratio of Average Income.....	54
6.11.	Source of Average Annual Income, by Education Level of Household Head .....	55
6.12.	Assessments of the Household's Economic Situation and the Outlook for Iraq .....	56
6.13.	Percentage of Households That Can Afford a Particular Item .....	56
6.14.	Could You Raise 200,000 Dinars in a Week?.....	57
6.15.	Percentage of Households That Had Been Offered Assistance from a Particular Source.....	58
6.16.	Percentage of Households That Own at Least One of a Particular Type of Household Item .....	58
6.17.	Mode of Transportation Used for Personal Trips .....	60
6.18.	Number of Households with a Cell Phone or a Landline.....	60
6.19.	How Households Access the Internet .....	61
7.1.	Literacy Index, by Age and Gender.....	64
7.2.	Schooling, by Age.....	65
7.3.	Type of School Attended, by Age .....	65
7.4.	Education and Employment Status, Ages 19–23, by Gender .....	66
7.5.	Main Reason for Not Attending School, by Age .....	66
7.6.	Education Level of Household Heads, by Region .....	68
7.7.	Vocational/Technical Training, by Subject.....	68
7.8.	Annual Household Spending on Education per Student .....	69
7.9.	Average Annual Cost of Education per Student, by Age.....	69
8.1.	Number of Bedrooms in the Household's Dwelling .....	72
8.2.	Average Number of Bedrooms and Other Rooms.....	72

## Tables

---

3.1.	The Sources and Reliability of the Electric Power Supply .....	15
3.2.	The Sources and Reliability of Sewage Systems .....	16
3.3.	Health Statistics of Iraq, Jordan, and Egypt .....	20
4.1.	Number of People in Surveyed Households, by Age .....	27
4.2.	Distribution of Youth in Surveyed Households, by Age .....	28
5.1.	Means by Which Unemployed Anbaris Reported Having Searched for Work .....	42
5.2.	Characteristics of the Employed, by Type of Employer .....	44
5.3.	Characteristics of the Self-Employed, Employers, and Employees .....	46
8.1.	Source of Damage to Homes .....	73
8.2.	Status of/Plans for Repairs .....	74



## Summary

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In Iraq's Anbar Province, the local population is the center of gravity, as is typical in any counterinsurgency campaign. Thus, in order for the forces of order to appeal to the people, security forces need to effectively engage not only in combat but also in efforts to understand the population and how they live: their concerns, their expectations, their grievances, and what drives those dispositions, as well as how they live and act on those concerns, expectations, and grievances. Also important is gauging changes in their assessments and attitudes over time with the aim of identifying the areas of greatest need. To acquire a better understanding of how Anbaris live and how conditions in al-Anbar may have changed, RAND conducted two surveys evaluating living conditions in the province. Face-to-face interviews were conducted with a random sample of 1,200 heads of Anbari households (here, a *household* is defined as a family and other related individuals normally living in one housing unit) from May 28–June 10, 2008,<sup>2</sup> and from May 23–June 9, 2009. Interviews were conducted by local Anbaris, who were trained over four days by instructors who had attended a separate training course held outside Iraq and conducted by RAND and subcontractor staff. While one might expect respondents in a conflict zone to react with some hesitancy toward a survey asking questions about their daily lives, the average response rate between the two surveys is 67 percent, a figure on par with response rates for similar surveys in other Middle Eastern countries.

The surveys and data are available to researchers upon request from RAND. The main findings, summarized in the following sections, suggest that, essentially, Anbaris are better off (as of 2009) in terms of key measures than they were in 2008. Importantly, the population generally feels safer, as indicated in a sharp decline in external displacement and in the sense among the public that the convulsive violence that plagued the province is significantly reduced. In other encouraging results, the economic climate shows signs of improvement, with a sizeable percentage of respondents reporting an increase in wage income since 2008. Access to health care, though still in need of attention, has not worsened since 2009, and the percentage of the population with access to education has not declined. In a similar vein, there is still room for progress in the functioning of key utilities, such as electricity and water, which remain unstable; but, at the same time, these services seem not to have worsened since the 2008 survey. Summaries of findings from the 2009 survey are presented in the sections that follow.

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<sup>2</sup> For 2008 findings and detailed discussion, see Crane et al., 2009.

## Security and the Effects of War

In a significant shift since the 2008 survey, larger percentages of the public in al-Anbar now offer positive assessments of the security situation in Iraq. Equally important is the widening belief that U.S. and Iraqi government efforts to improve local enforcement capability may have contributed to similarly improved police-force effectiveness in addressing crime. For example, although respondents cite crime as the biggest threat to neighborhood security, most now say they would turn to their local police, rather than other community-level actors, such as tribes or local leaders, to deal with crime effectively.

Anbari opinion is consistent with nationwide trends in Iraq regarding attitudes toward the security situation. Most Iraqis believe that the overall security environment has improved since 2008 due to U.S. efforts to restore law and order to Iraq, and most conclude that the United States has made progress toward its goals for Iraq since 2008.

## Public Infrastructure

The quality of water and electricity continues to be a major concern in al-Anbar, and conditions have improved little since 2008. Power supply remains erratic, with over half of all households experiencing daily outages. According to both the 2008 and 2009 surveys, the largest proportion of households still rely on a diesel-powered generator (shared with neighbors, operated by a neighborhood cooperative, or run by a local private company) for electricity when electricity is not available from the grid. Water supply is equally unreliable. Not surprisingly, dissatisfaction with the supply of water and electricity is fairly widespread in al-Anbar.

Although all urban homes are connected to public sewage lines, just 30 percent of rural households are connected. This portion has increased slightly, since 2008, however, when only 25 percent of rural homes reported having a public sewage connection.

As in 2008, access to places of worship is still better than access to police stations. Seventy percent of the Anbari population can get to a place of worship within 20 minutes, but only about 30 percent can get to a police station in the same amount of time. This lingering issue suggests an ongoing problem regarding the accessibility of security facilities. If violence, crime, and corruption are to be significantly reduced, populations must be able to report such instances, and law enforcement must be able to respond effectively to public need.

## Employment

As in 2008, households have at least one income-earner: Every head of household earns some income from wages. However, whereas employment in Western societies tends to be defined as an individual working one job steadily, employment in al-Anbar is seen quite differently. The largest proportion (roughly 40 percent) of those who work would not describe themselves as formal “employees.”

A closer examination of employment patterns and demographic characteristics shows that the population on the whole is fully employed, but a substantial proportion (20 percent) is out of work. Unemployment is highest among Anbari youth. Also evident in both surveys is that there are critical differences between men and women in labor-force participation rates. First,

unemployment is somewhat higher among females (24 percent) than among males (16 percent). Second, motherhood usually removes women from the labor force. The violence that paralyzed al-Anbar's economy after the 2003 invasion continues to be an obstacle for women somewhat more so than for men.

Nonetheless, wage income represents a significant source of employment in al-Anbar, although other forms of self-generating income activity, such as household production, are very important as well.

## Income and Standards of Living

Income earnings continue to rise in the province, which suggests that the abatement of violence is likely contributing to continued revitalization of the economy. A closer look at demographic differences shows no significant difference in urban versus rural earnings. Comparing wages at the individual level, we see that women's wages initially rise at the same rate as men's. However, by their mid-30s, women's earnings rise much more slowly than men's do. For all Anbaris surveyed, wage earnings are indeed the most important source of income, but revenue from agriculture and gardening is vital.

Fewer respondents (83 percent) report receiving food rations from the Iraqi government, compared with 2008 (92 percent). According to RAND findings, however, respondents say they also turn to other sources to acquire rations, including secular and religious nongovernmental organizations. Rations are critical to locals' survival, with 40 percent of respondents asserting that, without rations, they would be eating less.

With the great exception of food rations, which almost everyone receives, respondents report deriving only a small percentage of their income from transfers. Additional money is raised from rentals and property sales, but the percentage of income arising from the sale of large assets (e.g., houses) has declined sharply since 2007—a sign that economic distress is dissipating. Higher levels of education are not correlated with higher incomes, but they *are* associated with a greater likelihood of holding a salaried job.

Respondents generally do not report much in the way of savings. Just over 30 percent of households have a bank account, an increase over 2008's 20 percent. Households are more inclined to maintain their wealth in gold or other precious metals (44 percent do so).

Against the backdrop of optimistic assessments of their households' economic situation, respondents expressed pragmatic views about the prospects for continued economic improvement in the province. Few believe that recovery will occur in a matter of a few weeks or months. Most estimate that it will take many years for their province to recover. No one, however, thinks that economic revitalization will be forever elusive.

Despite widespread unemployment, the public is finally achieving a higher material standard of living. Most can afford some of the accoutrements of middle-class life, such as the ability to eat meat or keep their homes adequately heated and cooled. Every household has access to a cell phone, and most households have some other electronic goods. Half own a vehicle of some sort. However, formal saving and banking institutions are underdeveloped, which may explain why a number of households keep their wealth in gold. Still, if pressed to obtain cash speedily, most respondents say they could access 200,000 dinars (roughly \$200) if they had to.



## Education

Without question, education is very important to Anbaris. The population is widely literate, and there are few differences between the urban and rural sectors and between the sexes. Not surprisingly, these characteristics have not changed since 2008. Schooling is almost completely universal for Anbaris between roughly the ages of 7 and 22.

Those in al-Anbar who are not enrolled in school have different reasons for not attending. When males were asked why they were not currently enrolled in school, the largest proportion reported having received an adequate amount of education. Somewhat smaller proportions mentioned poverty, lack of interest, the need to find work, and difficulty getting into school. Females respondents who are not enrolled tended to report that school is not appropriate for them as females, that they lack interest, or that they are too poor. Such responses were common among women over 50. Younger females reported repeated failure in school as a reason for not attending.

## Health

Asked to list the three biggest problems facing health care, respondents most often cited a lack of health care professionals (due to the large number of skilled laborers that departed Iraq as a result of the war), the paucity of supplies and equipment in facilities, and a lack of proximate facilities that are easily accessible. These findings are consistent with those from 2008, when respondents pointed to similar deficiencies in health care services.

Possibly due to the continued departure of skilled doctors through 2008, respondents have increasingly begun to consult nurses for health care services.

Nongovernmental organizations and international organizations provide a large part of the population with the kind of services they used to get from government health care centers. Health care remains relatively inexpensive: Depending on services sought, affordability is a problem for only 20–40 percent of all households. Yet, just as in 2008, respondents find it difficult to get appointments with health care professionals, in large part because so many professionals have fled the province.

## Displacement

In a dramatic shift since 2008, respondents now report being far more likely to relocate within Iraq rather than to neighboring Syria or Jordan. In 2008, Anbaris who were reported displaced were most likely to have traveled to Syria or Jordan, the largest and second-largest recipients of Iraqi refugees, respectively. The main destinations now, however, are within Iraq (particularly Baghdad). Improved conditions in the capital (specifically, better job prospects and security), combined with an increase in immigration restrictions in Syria and Jordan, have likely influenced Anbaris' calculations.

## Acknowledgments

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## Abbreviations

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AQI	al-Qaeda in Iraq
CLC	Concerned Local Citizens
COSIT	Central Organization for Statistics and Information Technology
GDP	gross domestic product
NGO	nongovernmental organization
PC	personal computer
PDS	Public Distribution System
PSU	primary sampling unit
SP	sampling point
UN	United Nations
UNDP	United Nations Development Programme



## Introduction and Methodology

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Al-Anbar in 2009 was a very different place than it was in 2006. Then, the likely outcome of the struggle between al-Qaeda in Iraq (AQI) on the one hand and, on the other, Coalition forces, the local population, and the governing institutions of the province was anything but clear. Al-Anbar was once the cradle of a brutal Sunni insurgency that mired the Sunni-dominated province in violence and spread to other parts of Iraq. Many observers believed that insurgent forces were stronger in al-Anbar than in any other area in the country, and this earned the province the dubious distinction of being the most lethal region in Iraq. Since 2006, the level of violence in al-Anbar has declined dramatically. Life is returning to some semblance of normalcy as law and order improve, and politics has begun to replace violence as a means of settling differences and affecting outcomes.<sup>1</sup>

However, it is possible that conditions in al-Anbar could cease to progress or could even deteriorate. AQI could recover enough strength to renew attacks, especially if it has sleeper cells in place waiting for propitious opportunities, such as the final withdrawal of U.S. troops from Iraq. The relationship between the mostly Sunni province and the Shia-dominated central government is tense. Recovery from years of violence is by no means complete, guaranteed, or certain.

In al-Anbar, the local population is considered the center of gravity, as in any counterinsurgency campaign. Counterinsurgency is a blend of civilian and military efforts intended to simultaneously contain both the insurgency and its root causes.<sup>2</sup> Such efforts involve military, paramilitary, political, economic, psychological, and civic actions taken by an incumbent government or occupying force with the aim of minimizing the power of the insurgency. The local population is a key target of many of these activities because gaining the support of the population is central for consolidation of control and the subsequent restoration of law and order. Improving the local conditions that affect populations and their well-being is a critical step toward acquiring and maintaining that support. Thus, improving government capacity, improving access to health care and education, and bolstering the public's sense of physical security are vital because the population cares about these basic needs and essential services. The restoration of these services and capacities in the short term is also important because it facilitates economic and human development in the long term. The first step toward winning the population, however, is understanding it. For the forces of order to appeal to the people, actors need to understand not just local politics but also how individuals live and how they perceive their own needs.

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<sup>1</sup> See, for example, Sudarsan Raghavan, "A New Breed Grabs Reins in Anbar," *Washington Post*, October 22, 2008.

<sup>2</sup> U.S. Government, Interagency Counterinsurgency Initiative, *U.S. Government Counterinsurgency Guide*, January 2009.

One means of obtaining such knowledge is to survey the local population concerning local living conditions. To this end, from May 28–June 10, 2008, and from May 23–June 9, 2009, respectively, RAND conducted two surveys of al-Anbar households (here, a *household* is defined as a family and other related individuals normally living in one housing unit). Both the 2008 and 2009 efforts involved administering a detailed set of questions to the heads of 1,200 randomly selected households. The instrument was designed to collect a wide variety of data—ranging from demographics and housing to employment and living standards—about Anbari households and household members.

A primary purpose of the project was to identify key areas on which to focus U.S. assistance or Iraqi government efforts in al-Anbar so as to better address shortfalls in public services. The survey therefore asked households about their access to electric power, water, sewage services, health care, and education. The survey also queried individuals about educational qualifications, employment, and income so as to better inform decisions about investments in education and economic development.

Another major purpose of the survey was to collect information on the potentially enduring effects of the war that followed the 2003 U.S. invasion. We asked questions about household-member deaths, injuries, and incarcerations and about whether members of the household had fled the province. We also asked households about whether any members had moved to al-Anbar from elsewhere in Iraq. The data collected include some information on displacement, which will help estimate the number of internally displaced people and refugees in the province. This information will also be useful in measuring the levels of assistance and of services that may be necessary given population movements into or out of al-Anbar.

Al-Anbar was surveyed in 2004, when the Iraqi government, in cooperation with the United Nations Development Programme (UNDP) and Fafo-AIS, a Norwegian nonprofit research organization, carried out a nationwide survey and reported economic conditions at the province level.<sup>3</sup> Since 2004, however, a great deal has transpired in Iraq, notably in al-Anbar. Hence, additional surveys in 2008 and 2009 were required to evaluate changes in conditions in the province, including the effects of war on the population.

## Methodology

Both the 2008 and 2009 surveys consisted of face-to-face interviews with the heads of 1,200 Anbari households. The 1,200 households comprised approximately 8,700 total household members. The interviews averaged a little over two hours each. The surveys were implemented by Iraqi survey researchers who were affiliated with the larger firm to which RAND subcontracted the survey work. The firm employed 31 interviewers—15 male and 16 female—for the 2009 survey. Male and female interviewers were paired with one another to reassure the interviewees and to elicit more-open responses from female heads of household. Interviewers were trained over four days by supervisors who had completed a separate two-day training session conducted by RAND and subcontractor staff.

<sup>3</sup> Findings from this 2004 effort were reported in 2005. Throughout this report, 2004 data are from Ministry of Planning and Development Cooperation, *Iraq Living Conditions Survey 2004: Vol. II, Analytical Report*, Baghdad: Central Organization for Statistics and Information Technology, Ministry of Planning and Development Cooperation, 2005, unless otherwise noted.

The survey asked the heads of household to answer questions about living conditions in May–June 2009, May–June 2008, and earlier, as well as a few questions about income and employment in earlier periods. RAND’s survey questionnaire was based on the 2004 UNDP-Fafo survey,<sup>4</sup> although some items were altered in order to capture different aspects of the original measures. Other items were altered to address questions not included in the 2004 survey. However, because most of the questions were identical, comparisons of the 2004 survey and the RAND 2008 survey were possible, although this was less true of the 2009 survey for reasons described later in this chapter.<sup>5</sup>

As in the 2004 UNDP-Fafo survey, the 2008 and 2009 surveys included questions on family structure, employment patterns, consumption, income levels, and access to public services. Retrospective questions asked about living conditions in prior periods, usually 12 months prior to the survey. In a number of instances (e.g., in the cases of employment status and income), we posed the same question twice, asking once about the current period and once about a year earlier.

In addition to seeking to understand living conditions among the citizens of once-restive al-Anbar, we also sought to establish benchmarks for developing quantifiable measures of change in quality of life over time. Findings from the 2008 and 2009 surveys should, therefore, be helpful in assessing the effectiveness of past assistance programs and in targeting future programs for maximum effectiveness. The results also shed light on the relationship between stability and the prospects for improvement in living conditions.

### **Multistaged Sampling Framework**

Households were randomly selected on the basis of a stratified cluster sample. The selection methodology was designed to yield statistically valid results that may be generalized to the entire population of al-Anbar. RAND first stratified al-Anbar into four regions or strata: Ramadi, Fallujah, other urban areas, and rural areas. The number of sampling points (SPs) used in each stratum was determined according to population estimates for that stratum. The population estimates were for mid-2005 and were generated by COSIT in August 2005. Although COSIT’s detailed methodology for estimating Iraq’s population has not been made publicly available, the U.S. Census Bureau has been providing methodological assistance to COSIT for census studies and estimates since 2003. COSIT estimates of local populations are used by the Multi-National Force–Iraq and the Government of Iraq for reconstruction efforts, elections, and conducting policy referenda. The estimates are available at the province and district levels for 15 of Iraq’s Arab-majority provinces but not for the Kurdish region. (The Kurds operate their own statistical services separately from COSIT.) The COSIT estimates are based in part on the 1997 Iraqi census.

The second sampling stage included the selection of districts, towns, and villages within the four strata. This phase determined the primary sampling units (PSUs). The PSUs were

<sup>4</sup> The 2004 UNDP-Fafo survey was conducted by Iraq’s Central Organization for Statistics and Information Technology (COSIT), which is located in Baghdad. Fafo managed the 2004 survey, writing the questionnaire, supervising translation, selecting the sample, conducting pretests, and conducting the final analysis. Fafo provided us with the original survey instrument in both English and Arabic. COSIT surveyed a random sample of 21,668 Iraqi households. Most households were surveyed during April and May 2004, but surveys in Erbil and Dahuk were conducted in August 2004.

<sup>5</sup> A number of the 2004 survey’s questions on agriculture, maternal health, and child health were not included in the 2008 and 2009 surveys. Other questions were shortened or slightly modified. The 2008 and 2009 survey instruments are presented in this report’s appendix.



randomly selected based on probabilities proportionate to the estimated population of cities or districts within the al-Anbar governorate. Al-Anbar consists of seven cities or districts, all of which were included in this sample.

In the third stage, we selected SPs within the PSUs. The villages within assigned rural PSUs, and the streets within assigned urban PSUs, were defined as SPs. These SPs were selected randomly if a list of all possible urban sampling points (i.e., streets) or rural sampling points (i.e., villages) existed. If not, the area was divided into numbered grids, and the selection was made randomly from these official or informal grid maps. The grid area was small enough to locate as SPs either one or a few villages in rural areas or one or a few streets in urban areas. We selected 173 SPs or geographically clustered areas across the seven districts. These clusters were allocated according to probabilities proportionate to the population of the district.

The fourth stage involved selecting households within the SPs. To control costs, interviewers were asked to interview several households in each SP. However, to minimize the loss of information that might result from interviewing too many households in one SP, we limited the number of households in each cluster to seven. We arrived at this limit by calculating the loss of information that might result from the households in one cluster being more homogeneous vis-à-vis one another than was reflective of al-Anbar as a whole.<sup>6</sup> The selection of households within villages, along streets, or within residential compounds (known as *sokaks*) was accomplished according to the random route-walking principles described below:

- The starting point in urban areas was the first household on the left side of the street or sokak. After that, every third household on the route was contacted (yielding a pattern of the first, fourth, seventh, and tenth households being contacted).
- The starting point in rural areas was a central point, such as a mosque, school, or other public building. Facing the building, the walking route proceeded along the left side, starting at the first household on the left side of the street. After that, every third household on the route was contacted (yielding a pattern of the first, fourth, seventh, and tenth households being contacted).

The survey included 173 clusters, 90 of which came from urban areas and 83 of which came from rural areas. This generated a breakdown of 626 urban households and 574 rural households. Fallujah and Ramadi encompassed both urban and rural households.

We interviewed heads of household only. If the head of household refused to be interviewed, or if the interview could not be completed after three callbacks, the interviewer selected another household along the route within the same SP.

Approval for the survey was obtained from the Government of Iraq. The project was also approved by RAND's Human Subject Protection Committee and by the U.S. Department of the Navy's human subject protection procedure.

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<sup>6</sup> Households from a single SP may display more similarities with each other than they do with the rest of the households in the province. For example, responses from households in a Chicago neighborhood may display greater similarity with one another than with responses from a neighborhood in Decatur, Ill.

## Comparing the 2008 and 2009 Surveys: Learning from Past Experience

Implementing two surveys in consecutive years allows one to gauge the changes in conditions over time and to adjust priority areas accordingly. Questions about key measures should be identical or nearly identical for key measures, although not all items need to be structured in exactly the same way. The decision to alter questions may be made for a number of reasons. For instance, there may have been a better way to pose a particular question, or some questions may have elicited responses that were less relevant to the overall inquiry than desired. Other factors, such as question length and complexity, may be deemed to require adjusting.

Question length and complexity in the 2008 survey did motivate changes in the survey instrument for the 2009 survey. For example, the overall length of the questionnaire was reduced by roughly 40 percent, and agricultural questions were not included in the 2009 version. Also excluded were many questions that garnered identical answers from all 1,200 interviewees in 2008 and hence did not require repetition from one year to the next. We believed that, with fewer questions to ask, each interviewer could concentrate more attention on the questions that remained. Shortening the survey was also intended to decrease the likelihood of response fatigue, which was observed during the 2008 survey. Addressing these issues was intended to raise the quality of the data collected.

In our judgment, these strategies markedly improved data quality in the 2009 survey. Collectively, the answers were more varied, nuanced, and statistically plausible. However, the improvement in quality had the effect of reducing what could be inferred from the year-to-year comparisons between 2008 and 2009. Without absolute faith in the reliability and validity of the data—which are generally more difficult to achieve when carrying out a survey in the developing world rather than in the developed world—one cannot determine whether a difference between the 2008 findings and the 2009 findings reflects an actual difference in the environment or is merely an artifact from using data produced under regimes of unequal quality. For this reason, we caution against overinterpreting the data or reading too much into small differences between 2008 and 2009.

## Factors Influencing the Environment

In 2008, the survey team contacted a total of 1,692 households, of which 492 refused and 1,200 completed the survey. In 2009, the survey team contacted 1,901 households, of which 701 refused and 1,200 completed the survey. The response rates for each survey were 71 percent and 63 percent, respectively, both of which are considered robust for most populations. Refusals were distributed across the 173 SPs; none of the SPs exhibited unusual concentrations of refusals. Most households that refused to participate did so outright at the door. We attribute these refusals to concerns about safety. The average refusal rate of 32 percent is generally consistent with the average response rates among populations in the Middle East for surveys of this sort. Because households that refused were replaced with households from the same cluster, the refusals should not have skewed the survey results. The margin of error for each survey is  $\pm 2.8$  percent.



## The Security Situation and the Effects of War

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As the center of AQI's activity in 2006 and the most prominent point of the deadly "Sunni Triangle" following the U.S. invasion in 2003, al-Anbar was once the most violent province in Iraq. Violence fell sharply in 2007 and has continued to abate. Al-Anbar is now enjoying its lowest levels of violence since 2003, with especially dramatic declines in Fallujah and Ramadi.

### Perceptions of Security

With the decrease in violence comes a chance to rebuild shattered communities and reignite the process of economic growth. In such an environment, how do Anbaris feel about their current circumstances? Compared with the 2008 survey, respondents' assessments are far more positive, which suggests that U.S. and Iraqi efforts to secure the province have yielded positive results in the view of the population. Of note are improved evaluations of al-Anbar's local police, who earned dubious ratings among the population in 2008. Local structures, such as family and community leaders, are being consulted less frequently in dealing with security matters. Instead, Anbaris are increasingly looking to official organizations, such as their local police, a change that may be due to perceptions that law enforcement capacity has improved. Security, of course, remains a great concern in al-Anbar, as the previous greatest threat to neighborhood security appears to have been replaced by another. In 2008, the Coalition was perceived as the biggest threat in the province. Now that Coalition forces have been withdrawn, however, criminal groups are now considered the bigger threat.

When asked how the security in their area had changed over the past year, half of respondents said the situation was better and about another half said it was the same. *No one believed that security had taken a turn for the worst since 2008.*

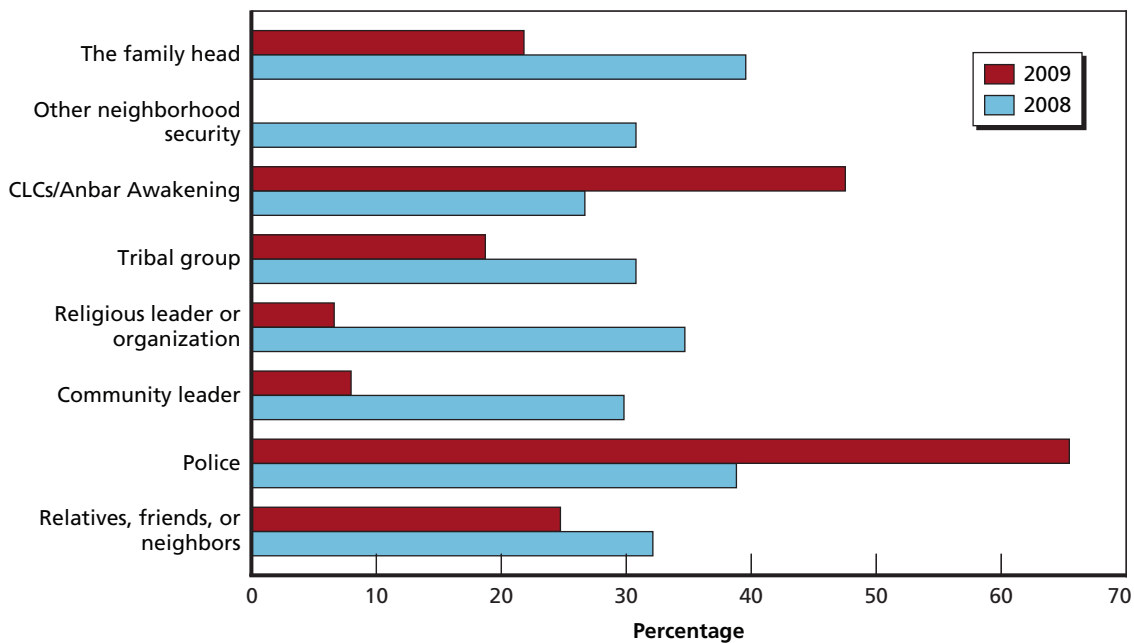
In a similar vein, respondents now have a higher opinion of the capabilities of their local security force. When asked to whom they would turn if any of their household members were threatened or became victims of a crime, significantly more respondents than in 2008 said they would turn to their local police. Sizable percentages said they would also look to the local security organization, to the Anbar Awakening, or to Concerned Local Citizens (CLC) groups,<sup>1</sup> and Anbaris' tendency to turn to a community or religious leader has declined substantially since 2008, as shown in Figure 2.1.<sup>2</sup>

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<sup>1</sup> However, the "Anbar Awakening" was not included as a category in the 2008 survey.

<sup>2</sup> In the 2009 survey, no one mentioned "other neighborhood security organizations." Also, note that, throughout the report, some totals in figures and tables may not add up to 100 percent due to rounding.

**Figure 2.1**  
**Who Would You Turn to If Threatened or Victimized by Crime?**



RAND TR836-2.1

As shown in Figure 2.2, respondents perceive that the greatest threat to their neighborhoods emanates from criminals, then, more distantly, from militias (including AQI) and Coalition forces. Compared with 2008, fewer feel that they are endangered by police.

These results are broadly consistent with nationwide viewpoints, which are similarly positive and have improved since 2008 (see Figure 2.3). According to a July 2009 Gallup poll of Iraqis, the public rates the country's overall security environment positively, with more than 50 percent saying that things are going "very" or "somewhat" well for U.S. efforts to bring security and order to Iraq.<sup>3</sup> This assessment is up more than 10 percentage points since 2008.

Similarly, as shown in Figure 2.4, when asked whether the United States is making significant progress toward restoring civil order in Iraq, respondents of an ABC News/*Washington Post* nationwide survey given in July 2009 reported generally positive results, a significant improvement over results from a similar survey from a year earlier.<sup>4</sup>

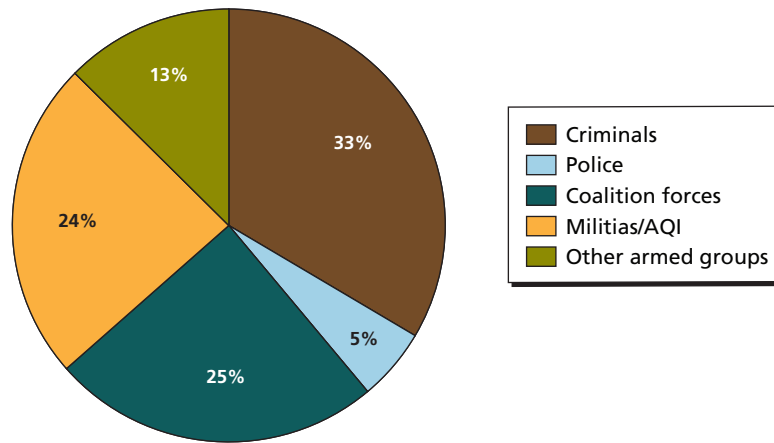
Respondents' satisfaction with other aspects of their lives, however, are in stark contrast with their views on security. Figure 2.5 displays an index measure of how satisfied Anbari households are with various living conditions. (Higher values equal greater levels of satisfaction.) In some cases, respondents are even more dissatisfied than in 2008 with lingering problems, such as pollution, child safety, and traffic. Water remains a particularly sore point. Conversely, there appears to be more satisfaction with commercial opportunities and the ability to get places.

Ease of travel to public facilities varies by type of facility, as shown in Figure 2.6 (where the y-axis represents the percentage of households who can get to the closest school, post office, etc., within a given period of time). Almost half of respondents can get to their closest place

<sup>3</sup> Gallup International surveys among 1,001 Iraqi adults, age 18 and over, July 7–14, 2008, and July 9–12, 2009.

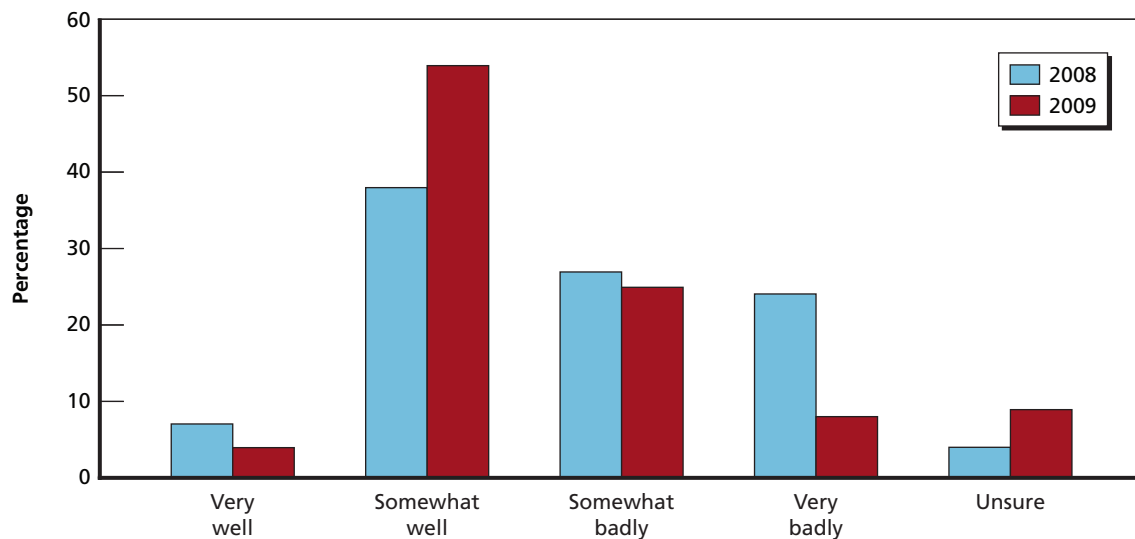
<sup>4</sup> ABC News/*Washington Post* surveys among 1,042 Iraqi adults (age 18 and up), July 10–13, 2008, and July 15–18, 2009.

**Figure 2.2**  
**Who Threatens Your Neighborhood the Most?**



RAND TR836-2.2

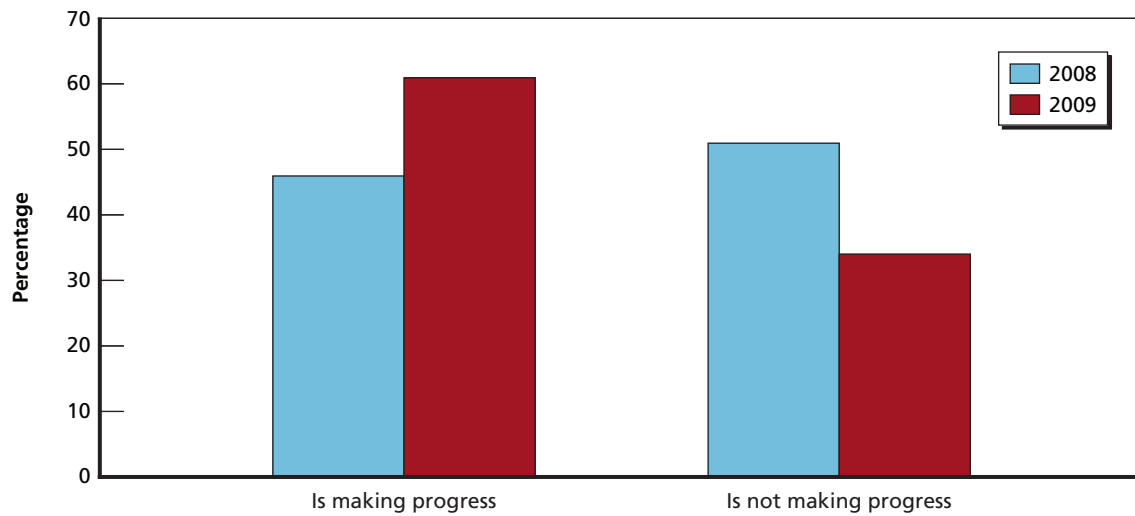
**Figure 2.3**  
**Are U.S. Efforts to Bring Security and Order to Iraq Going Well?**



SOURCE: Gallup International surveys among 1,001 Iraqi adults (age 18 and up), July 7–14, 2008, and July 9–12, 2009.

RAND TR836-2.3

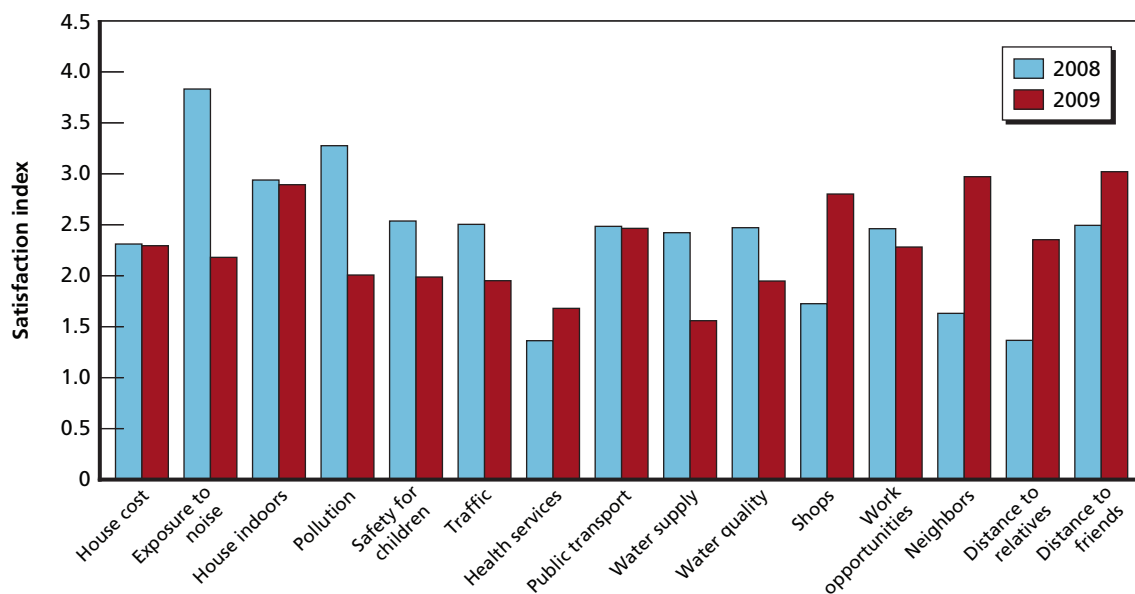
**Figure 2.4**  
**Is the United States Making Significant Progress in Restoring Civil Order in Iraq?**



SOURCE: ABC News/*Washington Post* surveys among 1,042 Iraqi adults (age 18 and up), July 10–13, 2008, and July 15–18, 2009.

RAND TR836-2.4

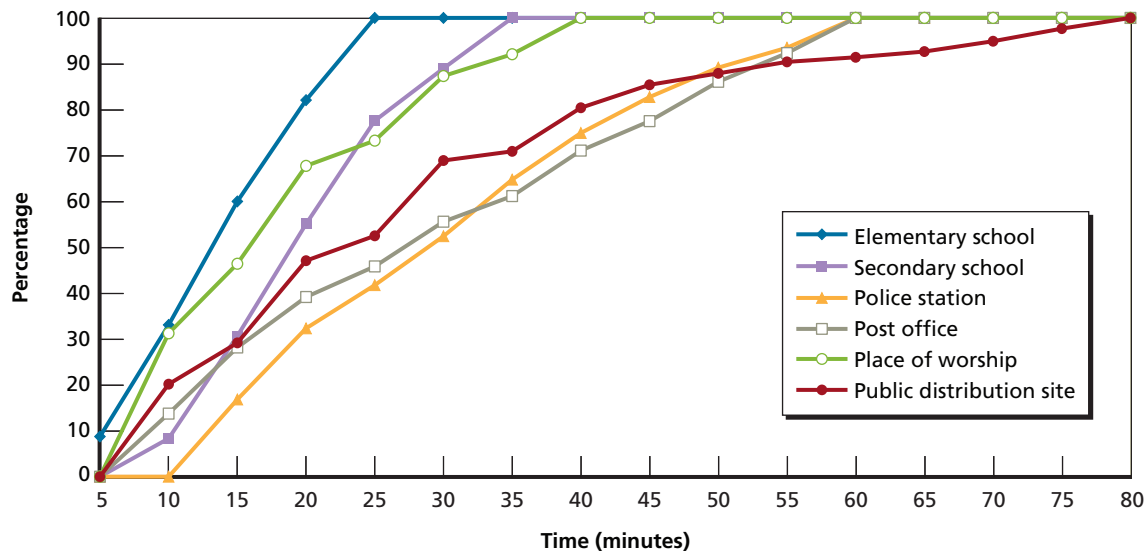
**Figure 2.5**  
**Satisfaction Indexes**



NOTE: The 2009 survey coded four levels of satisfaction; the 2008 survey coded five levels. The 2008 answers were rescaled for comparability with the 2009 survey.

RAND TR836-2.5

**Figure 2.6**  
Travel Time to Various Destinations



RAND TR836-2.6

of worship within 15 minutes, but two-thirds cannot get to their closest police station within 20 minutes—findings similar to those from 2008. We also note that Anbari households claim to have relatively easy access to various educational and medical facilities. As many as 60 percent live within 15 minutes of an elementary school, and 78 percent live within 25 minutes of a secondary school. Urban and rural residents experience roughly similar average travel times to all facilities—5 percentage points or less separate the two travel times—*except* in the case of their primary health care physician's facilities. In this case, the average urban travel time was 22 minutes and the average rural travel time was 32 minutes.

## The Effects of War

The survey asked household heads whether any household member had been killed due to war or crime during the past three years. At first glance, the numbers tell a tale of enormous casualties: 547 dead within 392 households.<sup>5</sup> Extrapolating this number to the entire province, with its 200,000 households, results in an estimate of 100,000 dead between 2006 and 2009, a number that does not encompass deaths during the first three years of war, which included bloody confrontations in Fallujah.

A still closer look at the numbers suggests that respondents, although asked about *household-member* deaths, may have included in their responses the deaths of members of their extended family. Only 53 of those killed—fewer than 10 percent—were either the spouse or the child of the household head. By contrast, only 8 percent of household members (701 of 8,726) were *outside* the immediate family. If members of the immediate family were as likely to be casualties of war or crime as were household members outside the immediate family, then

<sup>5</sup> More specifically, 29 households had three household members killed, 97 had two killed, and 266 had one killed.



the number of reported dead that actually lived in the reporting households should not have exceeded roughly 60.

Extrapolating from these 60 deceased to the entire province suggests that the number of war dead *since 2006* is closer to 10,000 than to 100,000, indicating considerably less trauma for the province as a whole. This figure may ultimately be too low as an estimate of the effects of war on al-Anbar in 2009, however.<sup>6</sup> Households in which all family members were killed or households that experienced a war casualty and therefore left the province would not have been included in the 2009 survey sample.

### **Injury, Displacement, and Crime**

Casualties as a result of the war were not the only effects of conflict. Anbaris have gone missing, have emigrated, have become displaced, and have been arrested. Almost one in every three households (393) reported one or more missing members (for a total of 500). As in the case of reported deaths, most of the missing (78 percent) were not members of the immediate family, suggesting that respondents again may have included in their responses members of their extended family rather than just members of their household. Also, 30 percent (153) of the missing who were not members of the immediate family were also reported dead. In other words, the individual who was initially missing was later learned or supposed to be dead. The ultimate fate of the remaining 70 percent of missing persons cannot be determined.

Almost a third of Anbari households (372) reported one or more displaced members (for a total of 620). It appears that departures often occurred in clusters: Almost a quarter of the departed people came from households from which three or more people had departed.<sup>7</sup> Of those departed members, 55 percent (620) left voluntarily; the rest were forced or coerced from home. As Figure 2.7 shows, just under half of the Anbaris who left home in 2009 moved to areas within Iraq (mostly Baghdad), and the rest emigrated. This is a dramatic shift from 2008, when external displacement accounted for most of the displacement flow. In 2008, Syria and Jordan, respectively, were the most popular and second most popular destinations of those leaving al-Anbar. Anbaris' decisions to relocate within Iraq were likely based on the improved security situation in Baghdad and the greater availability of jobs. Anbaris' decisions *not* to relocate outside Iraq were likely based on major host countries' increased restrictions on refugee entry.

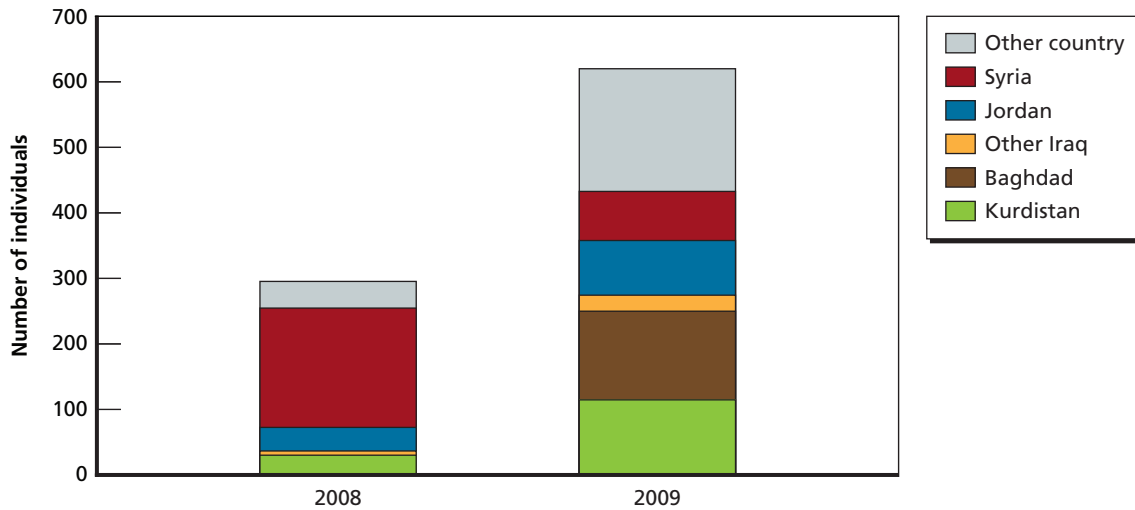
When asked if the household had moved since December 2007, approximately 20 percent (244) reported that they had. About 30 percent of those households had moved from somewhere within al-Anbar province; the rest (172) had moved to al-Anbar from another province of Iraq. Importantly, when asked if any individual lived *outside* of Iraq in 2007, *none* reported having lived outside the country during that year. Figure 2.8 shows the origin of the 172 households that had moved from another province.<sup>8</sup> When asked why they moved,

<sup>6</sup> One would also expect that if a young household head was killed, his young wife may have moved back in with her family, thus dissolving the prior household and leaving no household with which the dead man would have been associated. Yet, as noted, there were no reported children who (1) were not part of the immediate family and (2) did not have two parents living with them in the household. Only three households in the sample were headed by females under the age of 35. Their husbands were among the war dead, and each had a teenage brother living in the household.

<sup>7</sup> There may have been a few households from which more than four individuals departed, but the survey instrument truncated these answers to four departures.

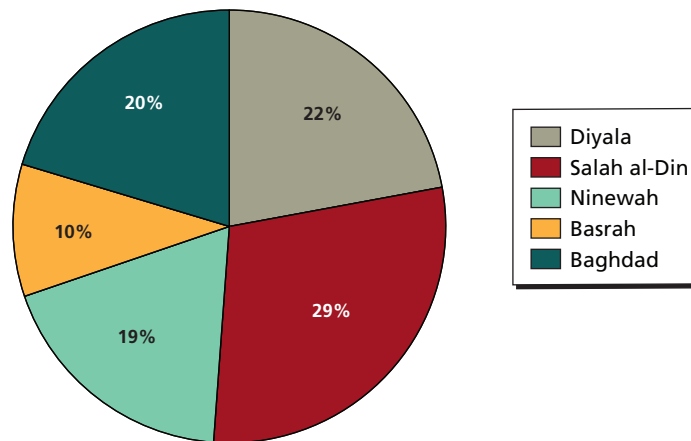
<sup>8</sup> Curiously, in 145 of these 172 households, at least one member claimed to currently be working in the same job he or she had held during the last week of December 2007 *even though the household had moved* to al-Anbar since that time.

**Figure 2.7**  
The Destination of Individuals Who Left Households



RAND TR836-2.7

**Figure 2.8**  
Prior Location of Households that Moved to al-Anbar After December 2007



RAND TR836-2.8

about one-third of the 172 cited violence or the effects of war; the rest cited economic reasons (e.g., wanting to own rather than rent, the small size of the previous house).

A total of 595 members from a total of 545 households have been displaced, and 20 percent of the surveyed households reported members arrested or detained (for a total of 324). Again, because only 10 percent of those arrested were spouses or children of the household head, we assume that respondents may have included in their responses members of their extended family rather than just members of their household.

Crime has been an ongoing problem in al-Anbar. Roughly one in every six households surveyed in 2009 reported that a member had been the victim of crime in the previous year. A quarter of those households (53) reported that a member had been the victim of a crime during

the last month.<sup>9</sup> Threats, assaults, and nonfatal shootings each accounted for a quarter of the crimes over the past year. Of the 53 households reporting that a member had been the victim of a crime during the past month, four reported that a household member was murdered, but none of the victims was part of the household head's immediate family.

## Summary

These results suggest that the security situation as perceived by Anbaris has improved, a trend consistent with nationwide patterns. Respondents in 2008 and in 2009 tended to feel that security had improved since the year before: In 2009, it was somewhat better than in 2008; in 2008, it was a great deal better than in 2007.

Second and importantly, most respondents perceive that local law enforcement organizations are now better able to serve their needs. This increased capability may be the result of many factors, not least of which is police training. Nevertheless, in light of the fact that Anbaris can get to a place of worship faster than they can get a police station—and, thus, by implication, that they can get to place a worship faster than police can get to their neighborhoods—more police stations may be useful.

The role that tribes, religious groups, and other organizations outside the government structure play in security appears to be less prominent in 2009 than it has been in previous years.

Finally, the war has clearly exacted a large toll on Anbaris, as one would expect, considering the violence and devastation that affected the province. However, there is no evidence that the overall effects have been significantly greater than official statistics suggest.

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<sup>9</sup> This number appears high. If each of the 211 households had suffered *one* crime during the past year, then one would expect only 19 or so households to have suffered a crime in the prior month. If the 211 households include those households that have suffered multiple crimes, then the number of people who suffered a crime during the last month would be higher, but the inferred distribution of the number of crimes per household would be uncharacteristic of normal Poisson statistics.

## Public Infrastructure

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Public infrastructure—water, sewers, transportation, and health care—is a key determinant of satisfaction in al-Anbar. The better the infrastructure, the more likely residents are to be satisfied with life and to trust public authorities. The poorer the condition of such facilities and services, the greater the level of public dissatisfaction with the government, which the population holds responsible for maintaining and providing those facilities and services.

### Utilities

In findings that differ little from those of the 2008 survey, the 2009 survey demonstrates that al-Anbar continues to be plagued by electric power outages and an unreliable water supply. In 2008, few Anbaris had regular access to either electric power or water, and these shortfalls were cited as major points of dissatisfaction with conditions in al-Anbar overall. Clearly, infrastructure needs the continued attention of the Iraqi government.

Among the 1,200 households responding to the 2009 survey, 59 percent have access to the electric grid, 37 percent rely on local diesel-powered generators, and 4 percent either have no access to electricity at all or access it via other means. Most Anbari households reported that their electricity supply is unstable, and all respondents experience either daily cutoffs (a reliability index of 4) or, even worse, power being off more hours than it is on (a reliability index of 5).<sup>1</sup> Table 3.1 suggests that electricity reliability is just marginally higher for those with local power than those tapping into al-Anbar's electric grid.

**Table 3.1**  
**The Sources and Reliability of the Electric Power Supply**

Source of Power	Households (%)	Reliability Index
None or neither	3.8	4.5
Grid power	52.3	4.4
Local power	37.1	4.3
Both	6.8	4.5

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<sup>1</sup> The other possible responses to “Does this source of electricity give you a stable supply?” were as follows: there is a stable supply (a value of 1 in our index), there are cutoffs from time to time (a value of 2), and there are weekly cutoffs (a value of 3). However, no households responded with these choices.

Among surveyed households, everyone reported having access either to the central sewage system or to septic tanks: 45 percent are connected, 32 percent use a septic tank exclusively, and the remainder uses both (see Table 3.2).<sup>2</sup> According to the United Nations (UN) standard for sanitation, which requires that household sewage systems be connected to public networks, al-Anbar's sanitation system can be characterized as "improved" or "adequate." However, respondents are unhappy with their sanitation systems. All report problems with their sewage systems, a fact essentially unchanged since 2008. All report either frequent problems (a reliability index of 2) or that the system "never works properly" (a reliability index of 3).

Anbaris dispose of their trash in many different ways. Half of Anbari households use two ways of disposing of trash, and 5 percent use three ways: 40 percent benefit from trash collection, 40 percent use an open public container; 40 percent burn their garbage; 20 percent use closed public containers, and 15 percent dump their trash directly.

Anbaris receive their water from a variety of sources. Piped water is available in 60 percent of all households, but, of these 720 households, 60 percent use additional sources, including open wells and tankers. Sources include piped water (25 percent), open wells (30 percent), tanker trucks (26 percent), springs (6 percent), and streams (1 percent). When asked to rate the dependability of their water supply, 43 percent described daily cutoffs, 42 percent described weekly cutoffs, and 15 percent described monthly cutoffs; none said the water supply was reliable. Households with no source other than piped water rated water reliability higher than did households that (1) combined piped water with other sources<sup>3</sup> or (2) used no piped water. Satisfaction with water supply is up slightly since 2008, when 39 percent reported occasional but-less-often-than-weekly problems, 35 percent reported weekly problems, and 27 percent reported daily problems. However, in 2009, 80 percent disagreed with the statement that the household has no problem obtaining the drinking water it needs; in 2008, the rate of disagreement with that statement was 50 percent.

There appears to be little systematic difference between urban and rural households in terms of electricity supply, but there are differences when it comes to water and sewage problems. Approximately 30 percent and 13 percent of rural households get their water from streams and springs, respectively, but no urban households obtain water from those sources. All urban households are connected to public sewage lines, but only 30 percent of rural households are so connected (up slightly from 25 percent in 2008). Two-thirds of rural households have septic tanks, and fewer than half of all urban households do. More than a third of urban households discard their trash in closed public containers, and no rural residents do.

**Table 3.2**  
**The Sources and Reliability of Sewage Systems**

Sewage System	Households (%)	Reliability Index
Public sewage network	44.8	2.4
Septic tank	32.2	2.7
Both	23.0	2.7

<sup>2</sup> No households reported being connected to anything other than a public sewage network or septic tank.

<sup>3</sup> Presumably, the more satisfied the household, the less likely it was to search for secondary sources.

These figures largely correspond with the 2004 UNDP-Fafo survey, which found that 88 percent of all urban households in Iraq used piped water as their main source of drinking water. That survey also reported that 33 percent of all Iraqi households have an unstable supply of drinking water.

## Health Services

Health services in al-Anbar are provided by both the public and the private sectors. Major hospitals and clinics are government-owned, government-operated, and financed by the central government. Privately owned clinics and hospitals are usually smaller establishments that range from private clinics to small, privately owned hospitals.

Although Iraq was long considered a relatively high performer in the delivery of health care in the Middle East,<sup>4</sup> Iraqis' access to healthcare and indicators of overall health deteriorated significantly after the 1990–1991 Gulf War and the ensuing sanctions. In fact, years of sanctions and war have exacted an enormous toll on Iraq's health care infrastructure, and corruption has emerged as a significant challenge to the effective administration of health care in the country. Millions of dollars meant for health care have gone missing, and the sick are charged higher fees for treatment at private clinics and must sometimes resort to bribery to receive critical care.<sup>5</sup>

Anbari households choose their forms of health care based on their access to medication, local tradition, the availability of trained professionals, accessibility, and the cost of obtaining health services (including the cost of transportation). Results from the 2009 survey are little changed compared with those from 2008 because years of war have taken their toll on the availability of health services. There was remarkable consistency between the 2008 and 2009 answers given by respondents when asked to name the three biggest problems facing health care in their province. As in 2008, respondents noted the following problems:

- There are too few health care professionals—many fled the country in the years following the 2003 invasion.
- There is a lack of health care supplies and equipment.
- There is limited range of health services available in close proximity to residents.

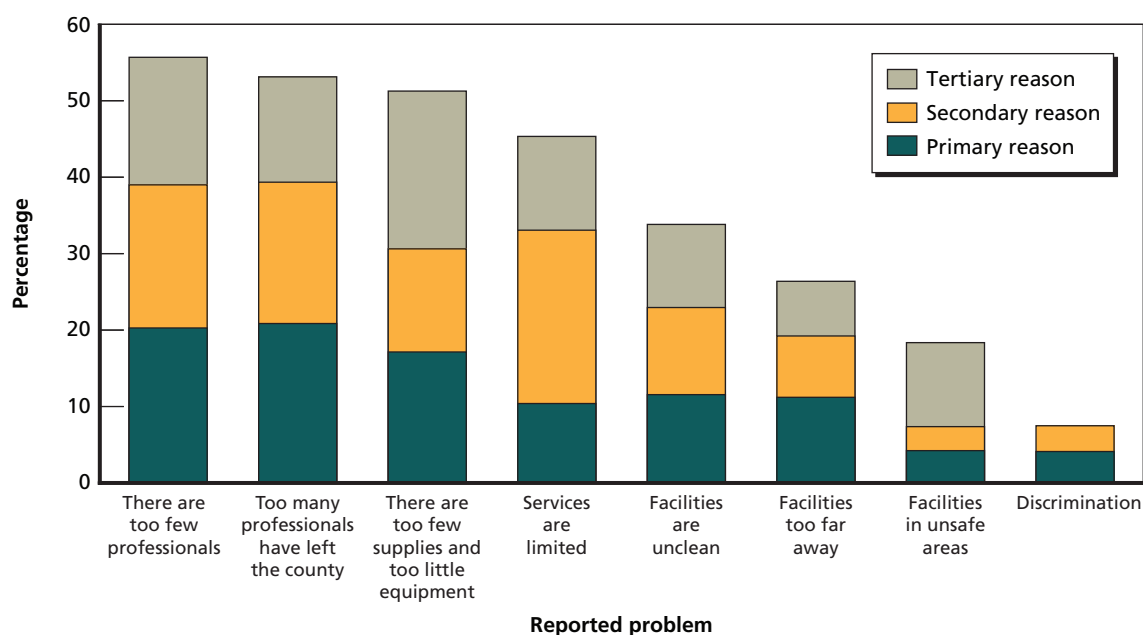
Unsanitary facilities, the distance to health care facilities, and other problems were also reported as problems, though less frequently (Figure 3.1). These issues appear to be unresolved and in need of attention.

In a notable change since 2008, the largest proportion of respondents, when ill, now seek out nurses and midwives (23 percent) rather than other types of health care professionals, such as family practitioners (19 percent), pharmacists (19 percent), specialty providers (20 percent), or local sources (traditional healers or neighbors at 13 percent and 6 percent, respectively). In 2008, half as many (11 percent) reported turning to nurses. This change in preference may be

<sup>4</sup> Seth G. Jones, Lee H. Hilborne, C. Ross Anthony, Lois M. Davis, Federico Giroi, Cheryl Benard, Rachel M. Swanger, Anita Datar Garten, and Anga R. Timilsina, *Securing Health: Lessons from Nation-Building Missions*, Santa Monica, Calif.: RAND Corporation, MG-321-RC, 2006, p. 222.

<sup>5</sup> See Corinne Reilly, "Iraq's Once-Envied Health Care System Lost to War, Corruption," web page, May 17, 2009.

**Figure 3.1**  
**Top Reported Problems in Iraq's Health Care System**



RAND TR836-3.1

due to the ongoing lack of physicians. Nurses and midwives fill the significant gap, but pharmacies and family practitioners are important sources of care nonetheless (see Figure 3.2). No households reported seeking medical attention from a religious organization.

Figure 3.3 shows that rural and urban households have similar preferences when it comes to choosing health care professionals. Both rural and urban households use traditional healers, midwives, and nurses. As Figure 3.4 indicates, the likelihood that a household will seek health care from a doctor versus traditional sources appears to be independent of the level of education of the household head.

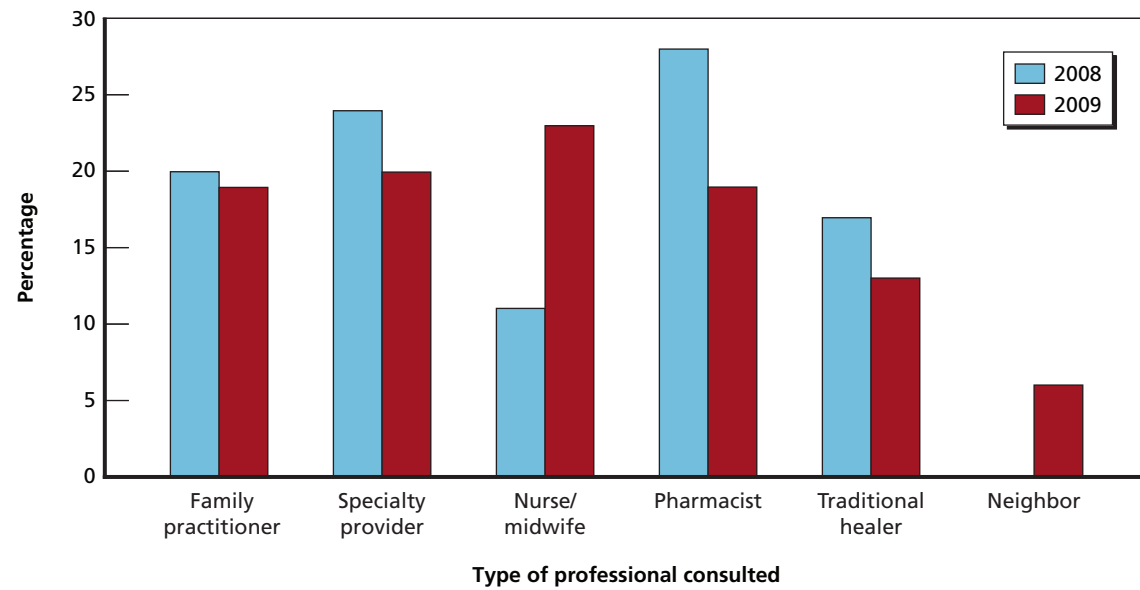
Although province-specific indicators are unavailable in the 2008 and 2009 surveys, country-level health statistics for Iraq and select Arab states, such as Jordan and Egypt, suggest how Iraq compares with other countries in the region (Table 3.3). According to the World Health Organization, Iraq lags behind other countries, in terms of available physicians, available health care facilities, and government expenditures on health care.<sup>6</sup> The pattern appears consistent with results from the 2009 survey.

The accessibility of health care—i.e., the ease with which individuals can get appointments—varies widely by the type of health care sought, as Figure 3.5 indicates. Half of all households reported that appointments were very or fairly easy to make, particularly in the case of primary physicians, specialty care, and dental care. By contrast, roughly half of all households reported that appointments for preventive care (including at government-sponsored clinics that supply vaccinations<sup>7</sup>) or emergency care were very difficult to make.

<sup>6</sup> Expenditure data from Iraq are from 2007, health care professional and facilities data are from 2008, and data from Jordan and Egypt are from 2007. See World Health Organization, "Core Health Indicators," undated.

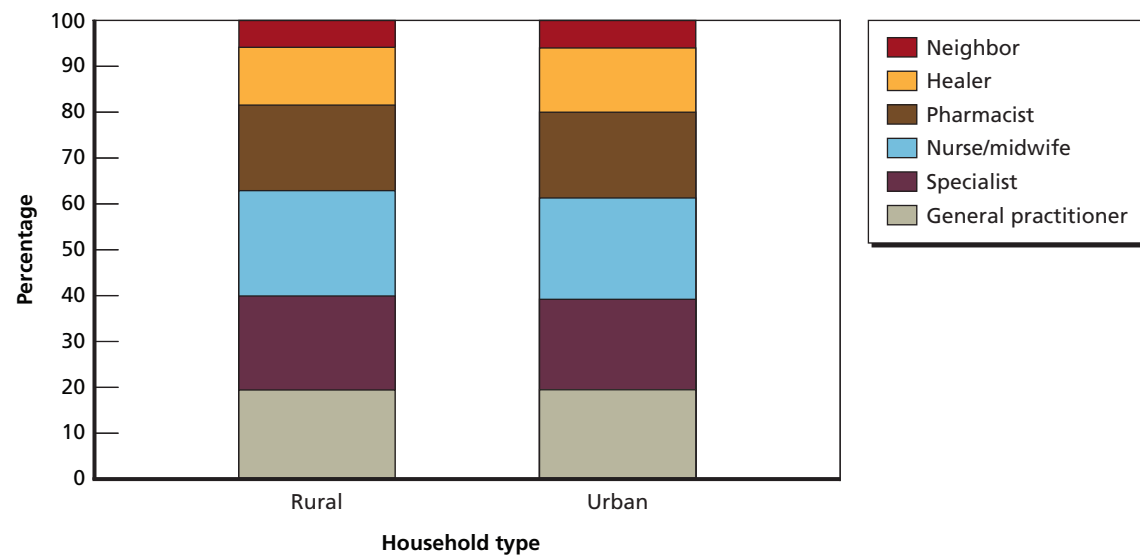
<sup>7</sup> All vaccinations are government provided and are usually administered in hospitals or in government-owned clinics. Private clinics rarely administer vaccinations. See Crane et al., 2009, p. 49.

**Figure 3.2**  
**Type of Professional Consulted by Households**



RAND TR836-3.2

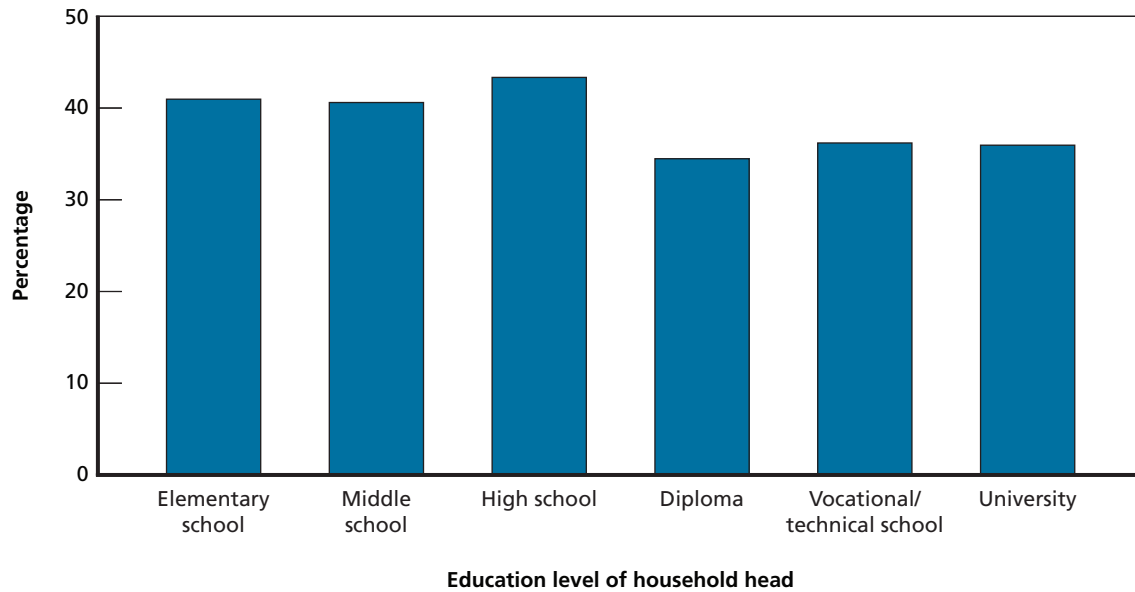
**Figure 3.3**  
**Source First Consulted for Health Care by Urban and Rural Households**



RAND TR836-3.3



**Figure 3.4**  
**Percentage of Households That Consult Doctors First, by Education Level of Household Head**



RAND TR836-3.4

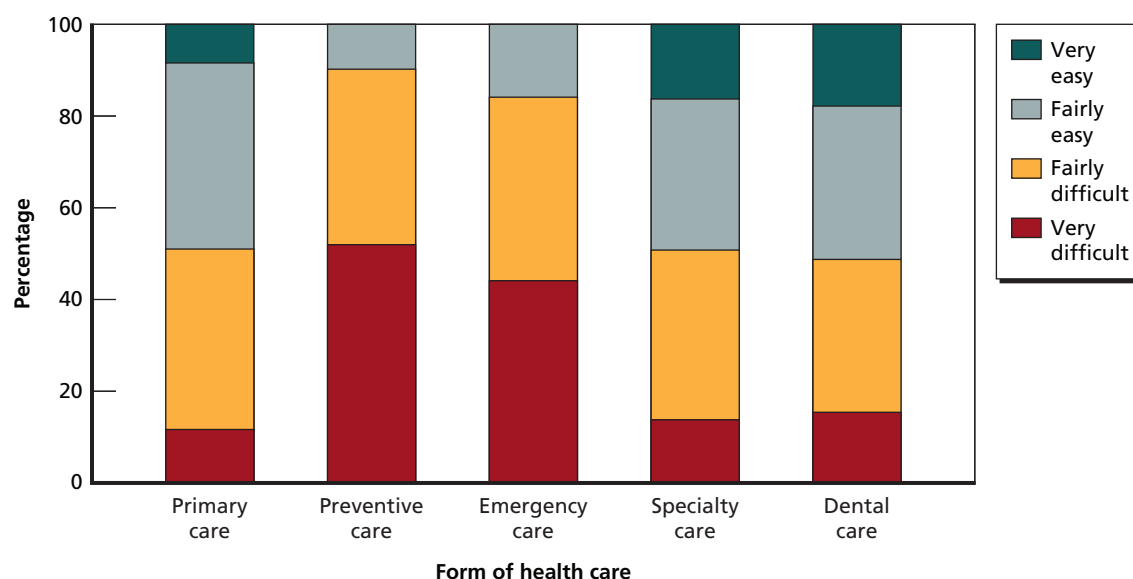
**Table 3.3**  
**Health Statistics of Iraq, Jordan, and Egypt**

	Iraq	Jordan	Egypt
Health care expenditures as a percentage of GDP	3%	10%	6%
Health care expenditures per capita	\$60	\$112	\$106
Number of nurses/midwives per 10,000 people	12	34	29
Number of physicians per 10,000 people	6	27	26
Number of pharmacists rate per 10,000 people	2	14	15
Number of primary health care units and centers per 10,000 people	1	2	1

SOURCE: World Health Organization, "Core Health Indicators," undated.

NOTE: Expenditure data for Iraq are from 2007, health care professional and facilities data for Iraq are from 2008, and data from Jordan and Egypt are from 2007. Throughout this report, dollar amounts are in U.S. dollars.

**Figure 3.5**  
Ease of Access to Various Forms of Health Care



RAND TR836-3.5

The affordability of health care varies, as Figure 3.6 suggests. Emergency care and dental care are the most difficult to afford, and specialty care is considered easiest to afford. In particular, availability of emergency care and preventive care, both of which are more frequently used by Iraqis, has been negatively affected by corruption since the start of the war, and this corruption has increased both the scarcity of supplies and medications and the cost of services. Many health care professionals have fled the country, out-of-pocket health care costs have risen sharply overall, and both specialists and general practitioners often demand private payments.<sup>8</sup>

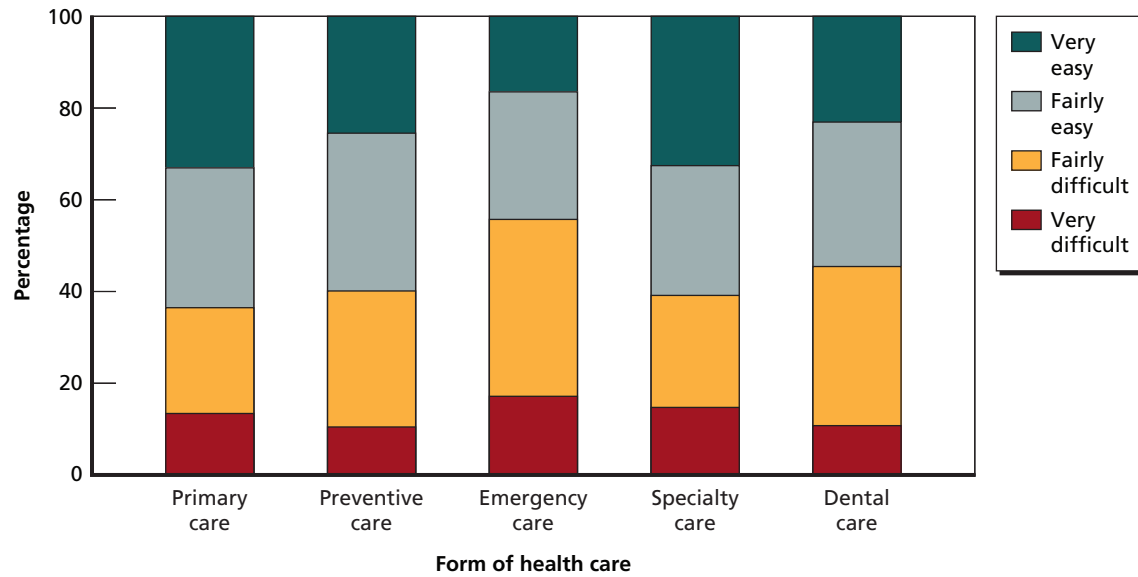
Almost all survey respondents, rural and urban, report that they live near a physician and a pharmacy. The median travel time to both is approximately 15 minutes, but travel time to pharmacies is clearly lower in general (see Figure 3.7, which combines average rural and urban travel times). More importantly, no households are so far from either a physician or pharmacist that members would be physically unable to access one or the other in a medical emergency. In 2004, 65 percent of respondents reported living within 15 minutes of a physician; the 2009 ratio of 20 percent is a good deal lower.<sup>9</sup> In 2004, a plurality (46 percent) reported living within 15 minutes of a pharmacy; in 2009, the total is 58 percent.

Despite the current reported challenges associated with accessing health care services, the process has become somewhat easier, compared with earlier years. In 2009, 100 percent of respondents said that, compared with 2004, it was easier for their households to get an appointment with a nurse, family practitioner, dentist, healer, or pharmacist. Only 46 percent said it was easier to get an appointment with a specialist, however. As for appointments with

<sup>8</sup> These circumstances also may be attributable to corruption in the health care system, which has increased since the 2003 U.S. invasion. Supplies and medicines are stolen from hospitals and sold to private merchants who then increase prices. See Reilly, 2009.

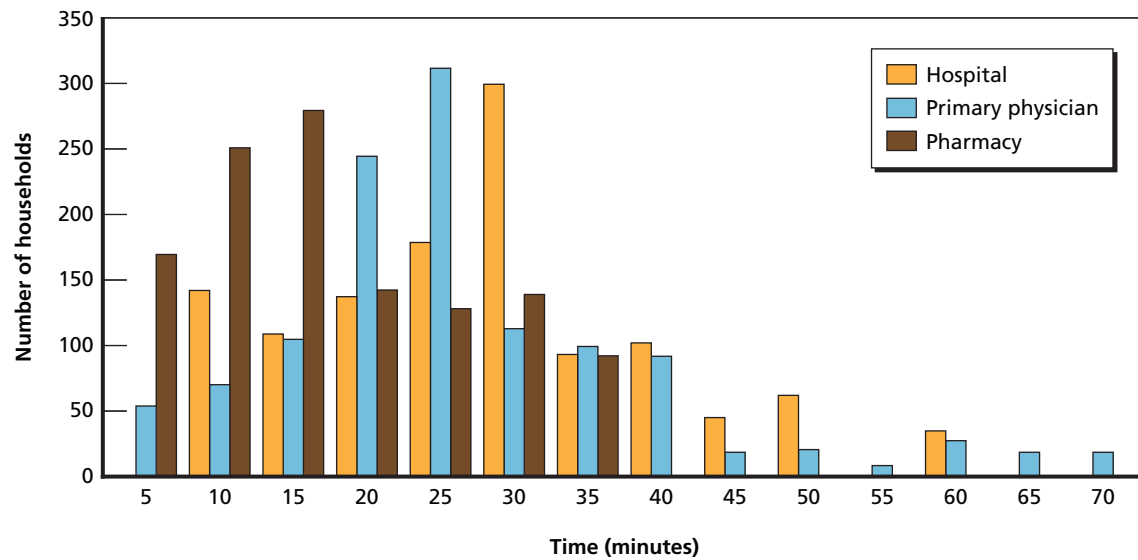
<sup>9</sup> Such sharp differences are quite likely due to artifacts in the data from the 2004, 2008, and 2009; to variation in methodology used; and to differences in the survey instruments themselves.

**Figure 3.6**  
**The Affordability of Health Care**



RAND TR836-3.6

**Figure 3.7**  
**Average Travel Time to Hospitals, Primary Physicians, and Pharmacies**



RAND TR836-3.7

emergency care providers, 55 percent said that getting an appointment was easier, 35 percent said it was harder, and 2 percent were not sure.

The Iraqi government was the main provider of health care according to the 2004 UNDP-Fafo survey. In 2009, as shown in Figure 3.8, for health care, respondents were roughly as likely to rely on privately owned facilities as they were to rely on foreign and local nongovernmental organizations (NGOs), such as the Red Crescent, and more than twice as likely to rely on either than on government-operated facilities. Similar patterns were documented in 2008, when respondents identified local NGOs as particularly important sources of health care and reported relying less than in 2004 on the Iraqi government.

As shown in Figure 3.9, well over half of respondents use personal savings to pay for health care. When the extended family is factored in, self-financing of health care characterizes three-quarters of all households. Tribes, mosques, and NGOs, in that order, pay for the medical care of the remaining households.<sup>10</sup> No one reported turning to international organizations, and no one mentioned outside groups, a category that could encompass organizations that provide financial assistance for medical care.

## Summary

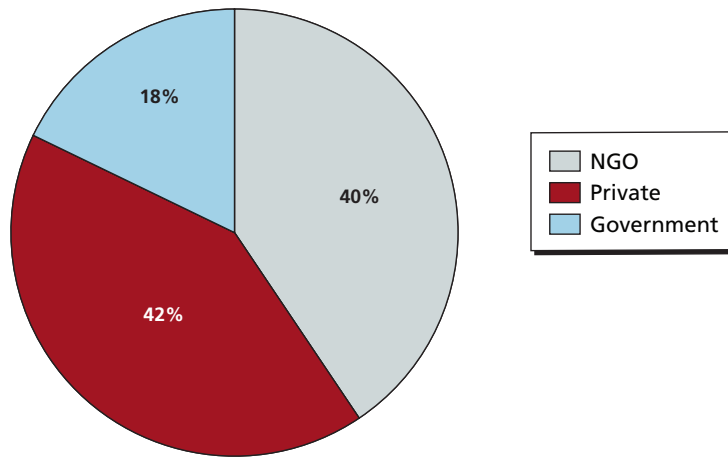
There has been little improvement in utilities in al-Anbar since 2008. Most respondents continue to complain of lack of an adequate usable water supply, and none believe that their electricity supply is sufficient.

Given the lack of overall progress in Anbari health care services, the sector still requires a great deal of attention. Little has changed since 2008 in regard to the dearth of qualified health care professionals in the province. Scarcity of professionals and supplies, limited services, and unclean facilities were frequently cited as major challenges in the province. The retention, acquisition, and return of health care professionals will continue to be a top priority for improving quality of life in the province. Until these issues are resolved, NGOs will continue to contribute to health care provision in light of the Iraqi government's still-limited involvement in the health sector.

Improving health care remains critical for fostering human development in both the short and long terms. To contribute to sustainable economic growth and development, the population must achieve a certain level of well-being. Replenishing the country's human capital is critical in this regard. There will be a need, for example, for health care professionals that Anbaris can access. The situation in al-Anbar, however, is not unique: It mirrors the status of the entire nation's health care sector.

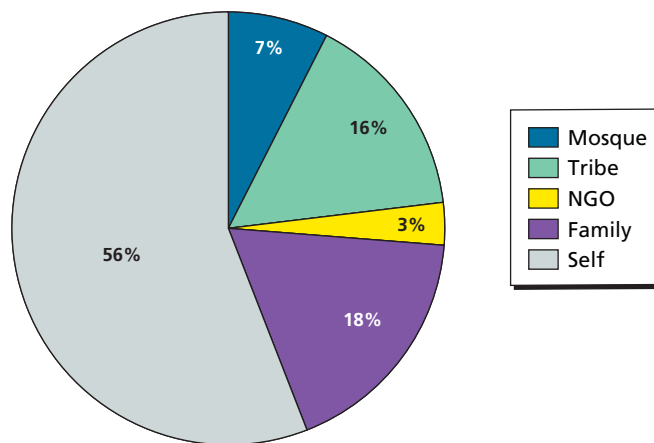
<sup>10</sup> Reportedly, most of the international NGOs left al-Anbar once U.S. forces withdrew from the province.

**Figure 3.8**  
**Types of Institution Relied on for Health Care**



RAND TR836-3.8

**Figure 3.9**  
**Sources of Health Care Financing**



RAND TR836-3.9

## Demographics

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Al-Anbar remains a province of large extended families and traditional expectations about women's roles in the household. Most females marry in their early 20s and have children soon after. Fewer than 2 percent of all mothers in the province worked before they got married. Birthrates are high, although they are lower than the levels seen 20 years ago. Roughly 10 percent of all household residents are not part of the household head's immediate family. Small households are uncharacteristic of al-Anbar and were virtually absent from the 2009 survey. Parents rarely live alone, instead tending to reside with their married children. By the same token, young couples without children never live alone. These factors, coupled with high levels of endogamy in the culture, suggest that, when war affects one person directly, a great number of people are indirectly touched. This means that events may affect a great many more personal perceptions in al-Anbar than in Western areas where nuclear families predominate.

Demographic patterns are less likely than other characteristics to change from year to year. Findings from the 2009 survey are consistent with or similar to the dynamics and demographic characteristics revealed in 2008. Interestingly, the rate of childbearing in al-Anbar has declined since 2006. In war-torn societies, childbearing tends to accelerate as individuals are motivated by risk to augment their families. As conditions become more stable, the rate of production of children declines, populations become more secure, and families feel less compelled to bear children in anticipation of instability.

### Family Size

In general, Anbari households are large, but this is not entirely due to the fact that families have many children.<sup>1</sup> Children tend to leave the household in their early 20s, if they can afford to do so.<sup>2</sup> According to survey results, however, many children in al-Anbar cannot do so; therefore, several hundred of the 1,200 surveyed households in the province contain what may be considered secondary families (i.e., children who have married and even had children of their own but have not established a separate household). All the elderly captured in this survey

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<sup>1</sup> Iraqi households are quite large by U.S. standards. In 2004, the average Iraqi household included 6.4 people. With an average of 8.0 people, al-Anbar stood out among other provinces, having the second-highest average household size (after Muthanna, with an average of 8.2 people per household). See Ministry of Planning and Development Cooperation, 2005.

<sup>2</sup> Iraq's social structure is influenced by the dearth of nursing homes and by the stigma of sending parents to such facilities. Most families plan for at least one child (almost always a male) to remain within their household, primarily to care for parents as they age. After the parents die, that person tends to buy his or her siblings' inherited shares in the house and stay in the home.

live with their children. Traditions of caring for parents, limited incomes, and concerns about safety may account for this pattern of secondary families.

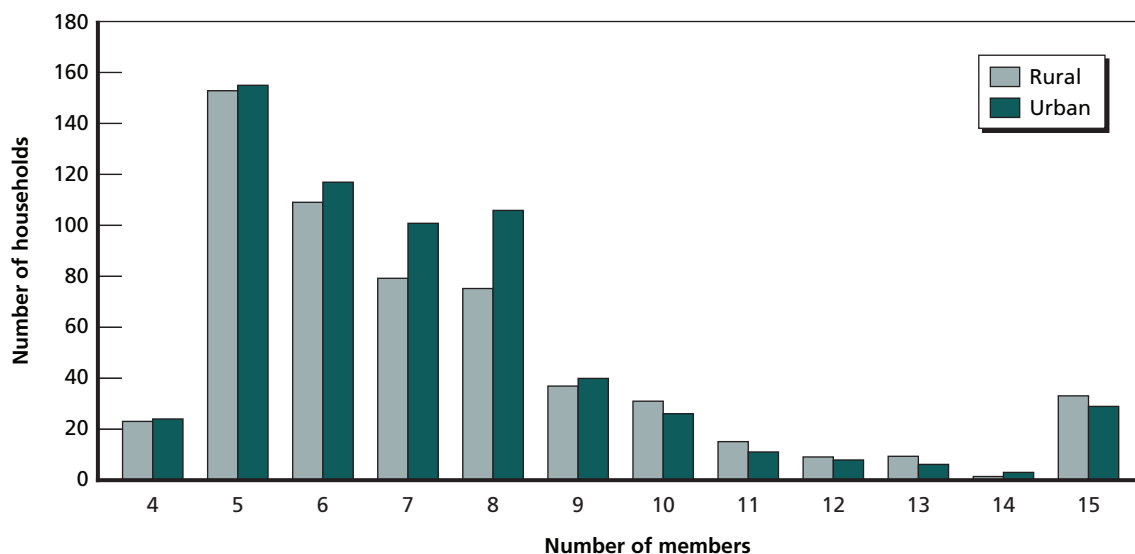
Figure 4.1 shows the distribution of households by size; note that there are no households with fewer than four members. The traditional model found in developing-country settings—that larger households predominate in rural areas and smaller households predominate in urban areas—does not appear to hold true in al-Anbar. This may be due to two factors: On one hand, al-Anbar's cities are not particularly large; on the other, the province's rural population densities are not that low (because almost everyone crowds close to the Euphrates River).

Observers may notice that the number of families with 15 members is much higher than the number with 11, 12, 13, or 14 members and that no household has more than 15 members. It is possible that the larger number of 15-member households reflects the number of households that have 15 *or more* members.

### Distribution by Age

In the 2004 survey of Iraq, the size of the 10-to-14-year-old cohort reached a plateau, with younger cohorts (i.e., 5- to 9-year-olds and 0- to 4-year-olds) being only slightly larger in size. In 2004, 43 percent of the population of Iraq was under age 15. In Table 4.1, which shows the distribution of al-Anbar's population by age based on 2009 survey findings, the 20-to-24-year-old cohort (which was 2004's 15-to-19-year-old cohort) stands out as larger than the next-youngest cohort (i.e., the 15-to-19-year-old cohort) and roughly as large as the next-youngest cohort after that (i.e., the 10-to-14-year-old cohort). The 0-to-4-year-old cohort is substantially larger than any other cohort. In 2009, roughly 40 percent of the population of al-Anbar was under age 15. Based on the ratio of children under 20 to women ages 20–39, one can estimate a total fertility rate (i.e., the number of children a woman can expect to bear over her lifetime)

**Figure 4.1**  
Distribution of 1,200 Households, by Number of Household Members



**Table 4.1**  
**Number of People in Surveyed Households, by Age**

Age (years)	Male	Female	Total
65 and up	82	123	205
60–64	98	51	149
55–59	88	113	201
50–54	246	224	470
45–49	158	125	283
40–44	148	154	302
35–39	154	214	368
30–34	275	200	475
25–29	460	440	900
20–24	542	443	985
15–19	449	416	865
10–14	506	489	995
5–9	543	539	1,082
0–4	722	724	1,446

of between 3 and 4 children per woman, which, although low for Iraq by historic standards, reflects a trend in the Middle East of lower birth rates over the last three decades.<sup>3</sup>

At the risk of over emphasizing year-to-year variations,<sup>4</sup> we note that Table 4.2 seems to demonstrate a substantial slowdown in childbearing between 2006/2007 and mid-2009. As al-Anbar has become calmer and the risk to children has declined, the need to ensure sufficient progeny against the possibility of disaster may have been mitigated, and birthrates may have dropped in tandem.

## Distribution by Gender

Data from the 2008 survey suggested that males outnumbered females by more than 40 percent—a difference that was almost entirely accounted for by Anbaris under age 35. Informed of this anomaly, the 2009 survey teams were alert to the need to count and characterize women correctly. The 2009 survey counted 4,471 males and 4,255 females—still a discrepancy,<sup>5</sup> but a far smaller one. The mean household size in al-Anbar can thus be calculated at 7.3 members, a figure significantly smaller than the 8 members recorded for al-Anbar during

<sup>3</sup> Hoda Rashad, Magued Osman, and Farzaneh Faoud Roude-Fahimi, *Marriage in the Arab World*, Population Reference Bureau, 2005.

<sup>4</sup> Many babies born in late 2008 may have been classified as 1-year-olds even though they had yet to hit their first birthday.

<sup>5</sup> Particularly in light of both the several hundred thousand males who died in the Iran-Iraq War during the 1980s and the predominantly male casualty patterns of the internecine violence following the 2003 invasion.



**Table 4.2**  
**Distribution of Youth in Surveyed Households, by Age**

Age (years)	Males	Females	Total
11	81	80	161
10	131	132	263
9	72	78	150
8	108	113	221
7	117	111	228
6	102	95	197
5	144	142	286
4	159	135	294
3	160	174	334
2	189	188	377
1	129	139	268
0	85	88	173

the 2004 survey. Male-to-female ratios do not appear to vary significantly between urban and rural households, as shown in Figure 4.2.

In the 2008 survey, a parallel truncation was visible at the upper end of the age spectrum: Only 28 individuals over age 60 years were recorded. In the 2009 survey, roughly 4 percent of all Anbaris were 60 years or older, a figure close to the 5 percent that the UNDP-Fafo survey recorded for Iraq as a whole in 2004 and also closer to the estimate of 4.7 percent made by the UN's population division for 2010.

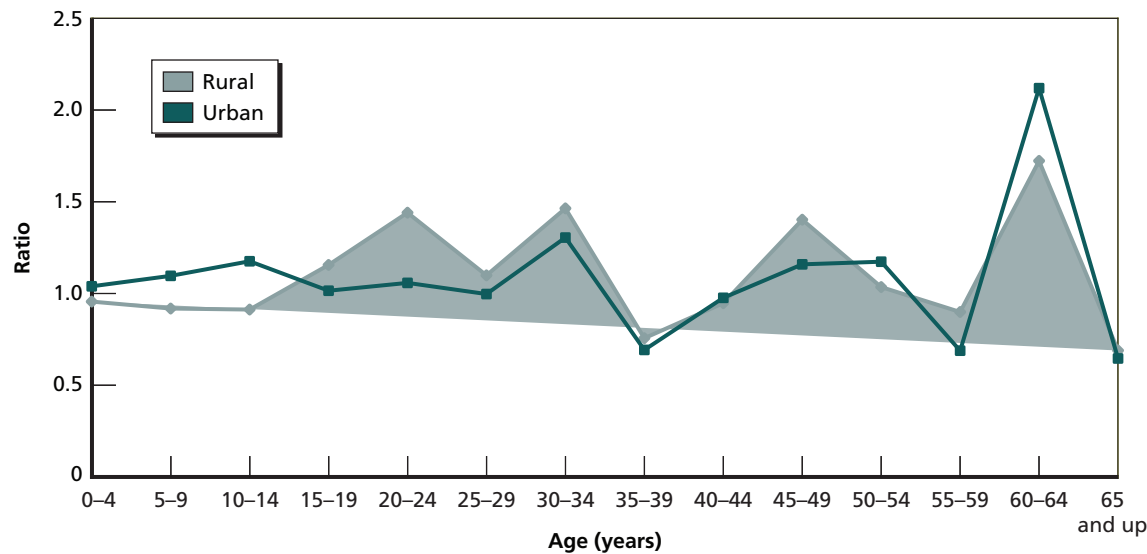
Females head roughly 8 percent of the 1,200 households surveyed in 2009. This represents only a marginal decrease from the 2004 figure of 10 percent. Every woman who heads a household is a widow and has children. This percentage of female household heads stands in contrast to the expectation that the percentage of households headed by women would be higher because of young male casualties sustained during the multisided conflict in al-Anbar both between U.S. forces and Anbaris and between Anbaris and such groups as AQI.

Figure 4.3 shows the age of the household heads by gender. Apart from the fact that people in their early 20s do not head households very often (and that only three female household heads are under 35), the distribution is unremarkable.

## Extended Families and Households

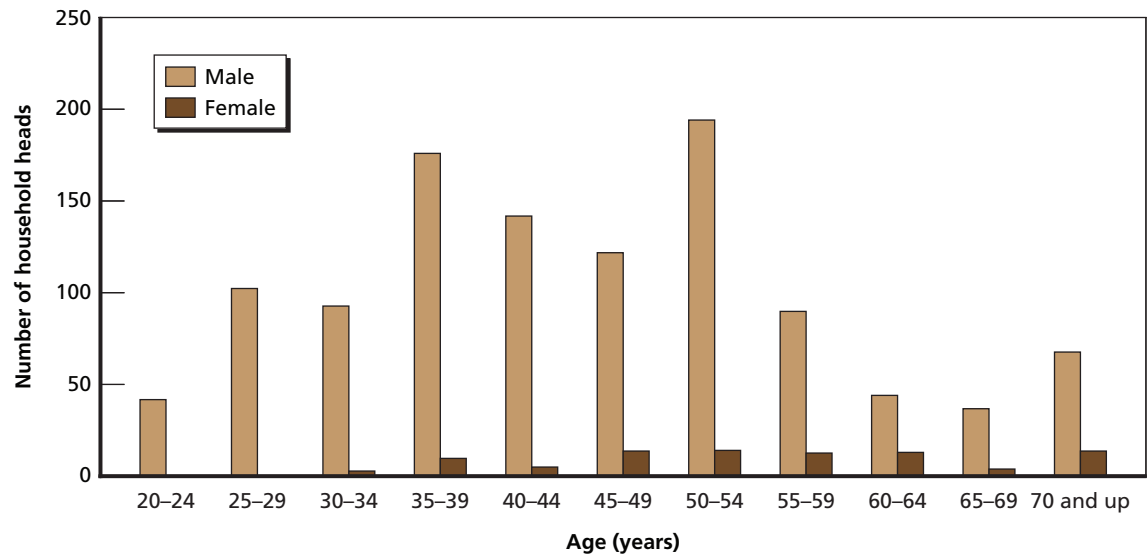
Of the 1,200 households surveyed in 2009, nearly two-thirds are made up of at least one adult and his or her unmarried children. The remainder of households comprises members that are not part of the immediate nuclear family.

Figure 4.2  
Male-to-Female Ratio, by Age and Region



RAND TR836-4.2

Figure 4.3  
Number of Household Heads, by Age and Gender



RAND TR836-4.3

Among this group of extended families:

- One or two grandparents reside in 11 percent of households.
- One or more siblings of the household head reside in 2 percent of all households.
- Twelve percent of households comprise a son, a daughter-in-law, and her children, but no household hosts *just* a son-in-law and his children.
- Six percent of households host siblings of the head of household and no other relatives, and, in 57 of these 90 households, a male sibling of the household head that can be said to have “protected” the household.
- Only 4 percent of respondents who said that “other relatives” reside in the household claimed that no grandchildren live there.

Figure 4.4 shows how many nonnuclear family members live in the households that host such members. These numbers may be artificially reduced because households with more than 15 members were truncated to a maximum of 15.

Incidentally *every* woman over the age of 38 is a mother, a tribute to good reproductive health in al-Anbar, to the existence of childless women who consider themselves mothers because they are raising one or more of their relatives' children, or to respondents' decisions not to reveal the existence of women over 38 who have not become mothers.

## Children

Nearly two-thirds of households reported hosting at least one child under age 6. Figure 4.5 shows the number of households by the age of their youngest member. Note that every single household reported at least one member age 20 or under. There are no empty nests in al-Anbar, or at least there were none in the sample.

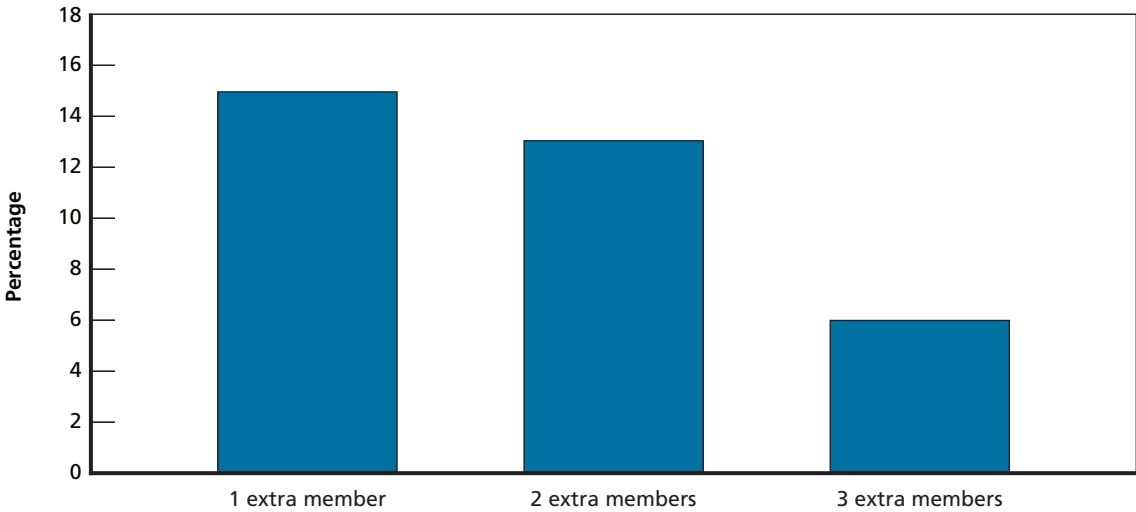
Child spacing is fairly close in al-Anbar, and the large families are a consequence of frequent childbirth. Figure 4.6 depicts the spacing between childbirths. Note that no households reported twins or two children born within the same year. Twinning normally occurs in roughly one out of every 80 births.

In a region marked by war, one would expect to see a high number of children who are missing one or both parents. Figure 4.7 displays the percentage of children in each age group who have (1) both parents living, (2) only their mother living, (3) only their father living, or (4) no parents living. The mother of every child age 19 or under is alive. Conversely, by the time a child reaches age 8, his or her chances of having lost a father are 10 percent; by age 20, they are almost 20 percent. According to the 2004 survey, fatherless children account for 1 percent of the total; motherless children account for 3 percent.

## Marriage

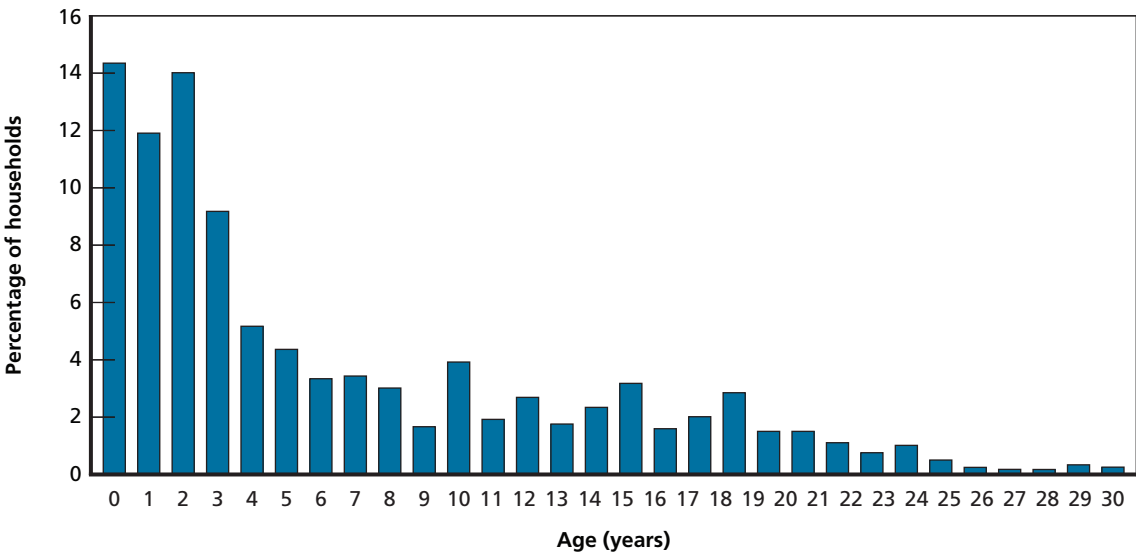
As children grow up, they become inclined to marry. Figure 4.8 records the reported age at marriage of all reported married individuals by gender. The peak marriage age is 24 among females and 25 among males. The relatively late age of marriage for young women is somewhat surprising and may be a consequence of relatively high levels of education in al-Anbar. How-

**Figure 4.4**  
**Number of Households with Members Who Are Not Part of the Immediate Family**



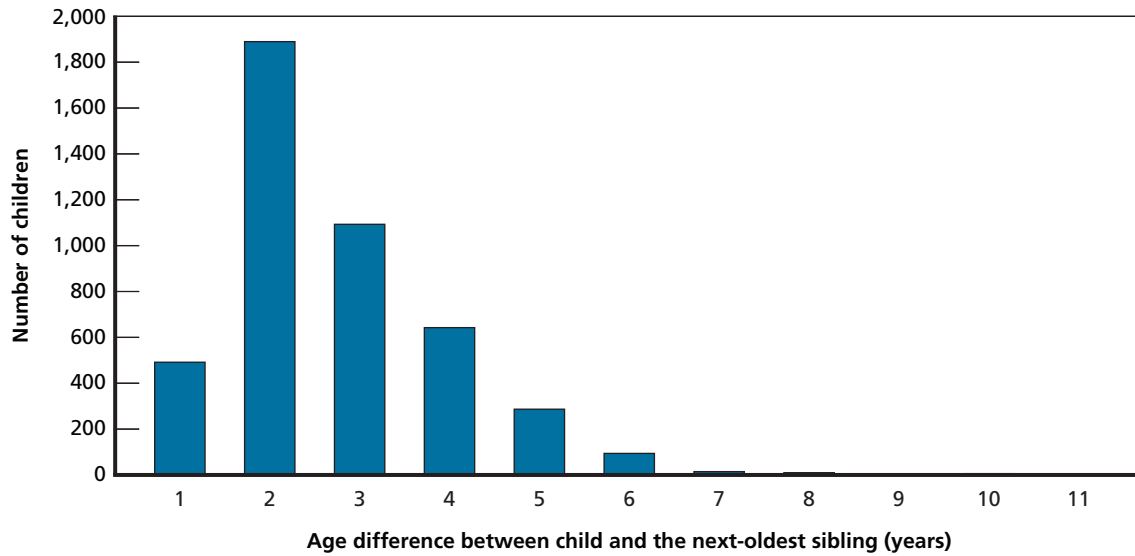
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**Figure 4.5**  
**Percentage of Households, by the Age of the Youngest Member**



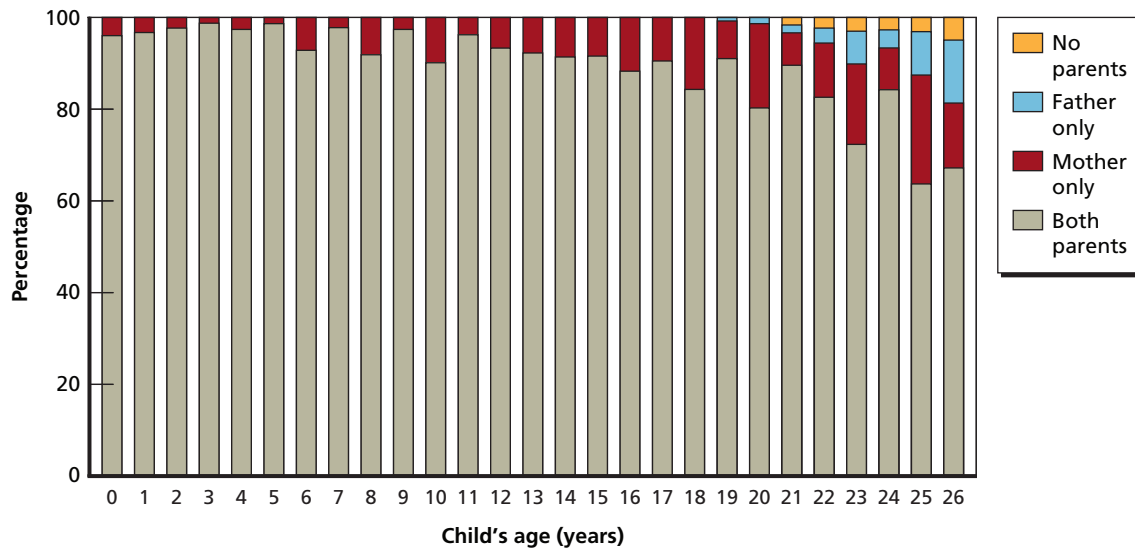
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**Figure 4.6**  
Number of Children, by the Age Difference Between the Child and the Next-Older Sibling



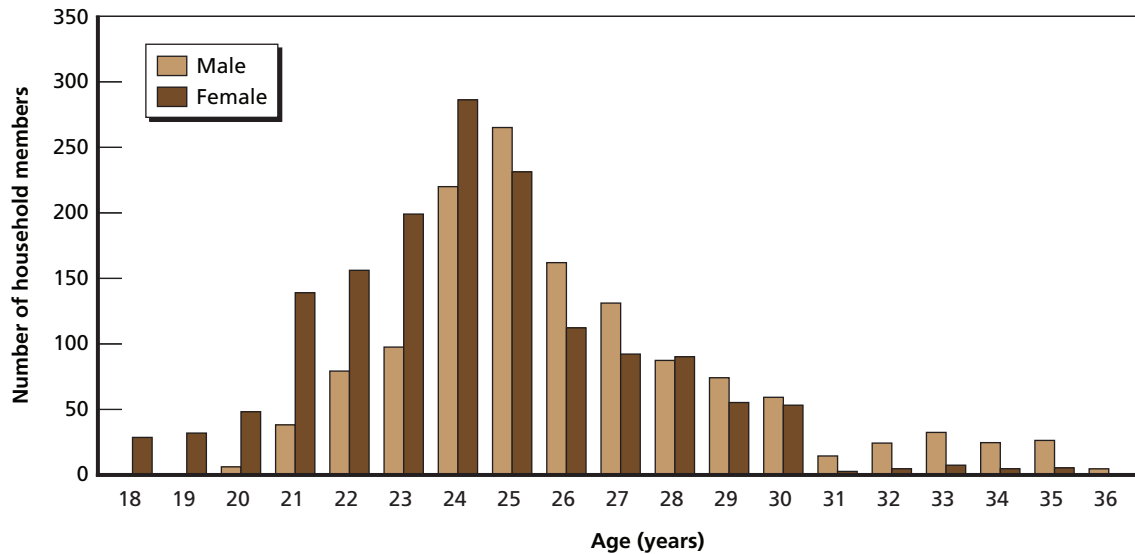
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**Figure 4.7**  
Percentage of Children with Living Parents, by the Child's Age



RAND TR836-4.7

**Figure 4.8**  
**Age at Marriage**



RAND TR836-4.8

ever, marriage patterns are changing in the Middle East and Persian Gulf, and Iraq reflects such patterns. In the Middle East, women are marrying less frequently while in their mid-20s.<sup>6</sup> Although the number of women in the Middle East who marry young is still very high, fewer are choosing to marry in their 20s for a variety of reasons, including improved access to education and to the perceived economic and social costs of marriage. Policy reforms that have expanded women's marriage options have also facilitated a willingness to marry later. What is more interesting, at least from the Western perspective, is the relatively brief age window within which marriage takes place, particularly for women.<sup>7</sup> Only around 2 percent of all women and 9 percent of all men first became married after the age of 30.

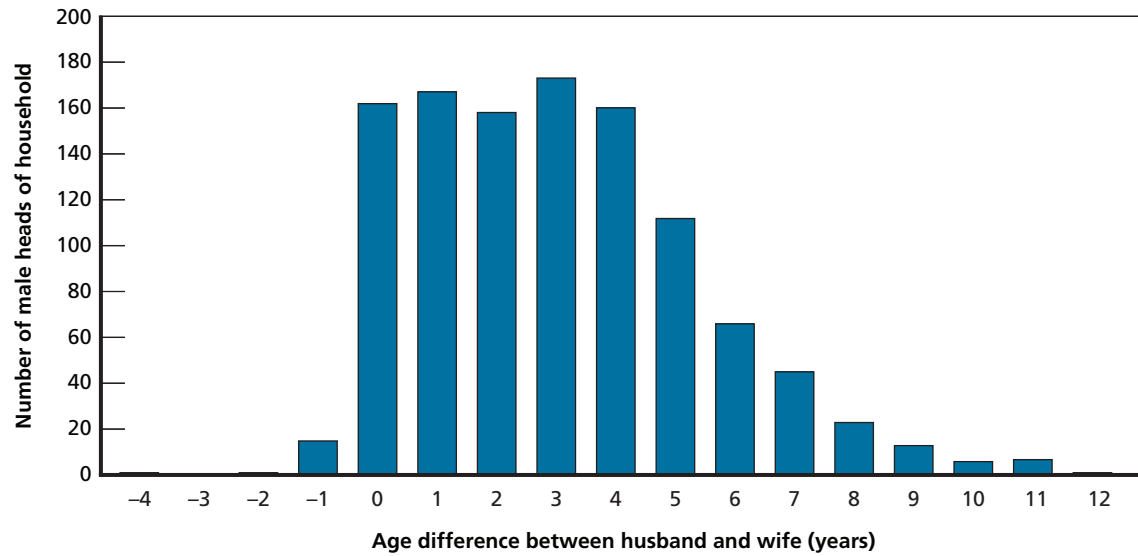
On average, as per Figure 4.9, the male head of household is 4 years older than his female spouse. The male distribution assumes a classic bell-curve shape to the right of the mean but not to the left: Of the more than 1,000 male heads of household in the sample, only 17 were younger than their wives and only 2 were younger by more than a year. It is not clear whether this is evidence of social pressures or of creative birth-year reckoning.

Figures 4.10 and 4.11 show the marriage status of men and women, respectively. Figure 4.10 combines regularities and artifacts (e.g., the handful of 18-year-old widowers). Although more than 10 percent of all the men recorded in the sample were married before the age of 23, none under age 23 reported being married. Normally, this would suggest that early marriage is an older habit, but the data portrayed in Figure 4.12 suggest otherwise: The average

<sup>6</sup> The trend of marrying at younger ages has been most pronounced in Libya, Kuwait, and the United Arab Emirates, where, on average, 40 percent of women get married between ages 15 and 19. In Tunisia, Lebanon, and Algeria, 15–21 percent of women ages 35 to 39 have never been married. Although marrying at age 24 and under is still common, the number of women who are marrying in their 20s has been on the decline since the 1980s and 1990s. See Rashad, Osman, and Roude-Fahimi, 2005.

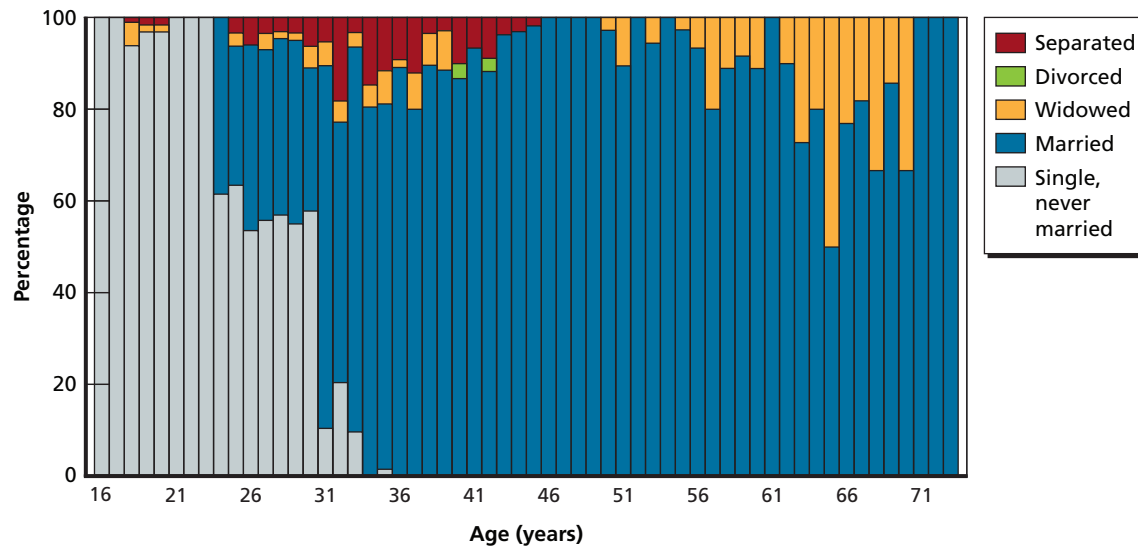
<sup>7</sup> There are indications that, with the return of refugees and increased competition for new housing, the age upon first marriage has been creeping up.

**Figure 4.9**  
Number of Male Heads of Household, by Age Difference Between Husband and Wife



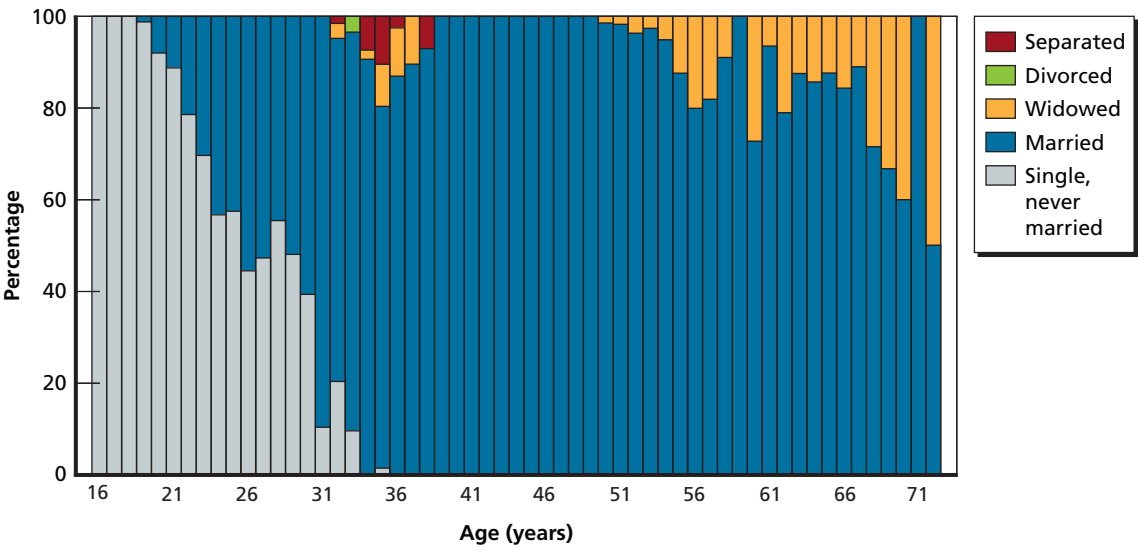
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**Figure 4.10**  
Marital Status of Men, by Age



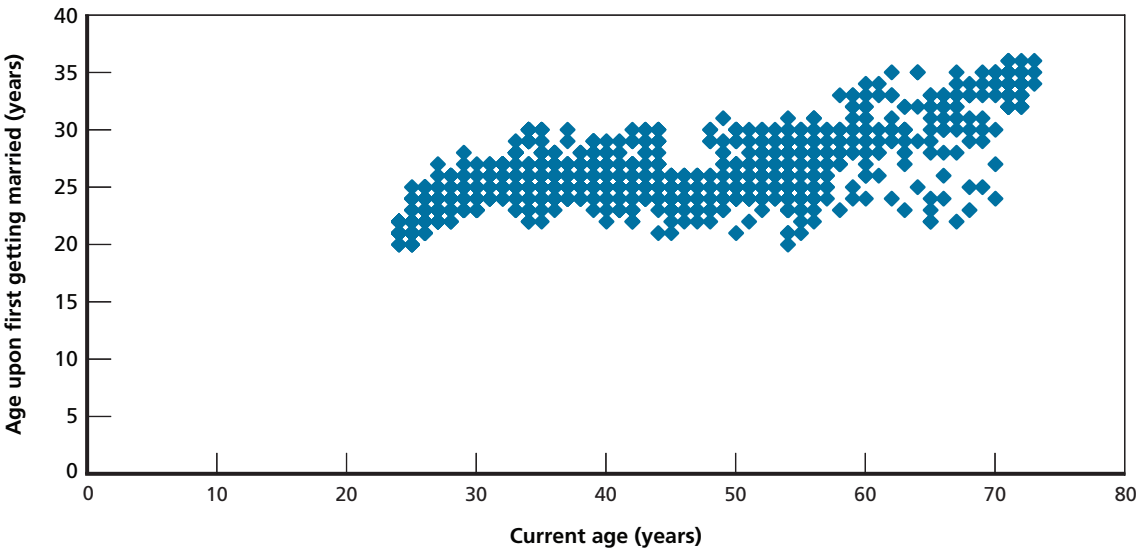
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Figure 4.11  
Marital Status of Women, by Age



RAND TR836-4.11

Figure 4.12  
Scatter Plot of Current Age and Age at First Marriage Among Men



RAND TR836-4.12



age of marriage for men over age 55 seems to be higher than for younger generations, and the most-recent cohorts seem to be marrying at even younger ages.<sup>8</sup> Indeed, 33 percent of those ages 24 and 25 were already married by the time they were 25, where as only 7 percent of those age 26 and up were married by the time they were 25.

Separation and divorce are quite rare in al-Anbar. Figure 4.10 shows that men in their mid-30s were occasionally separated but that men age 45 and up were not. There were only two divorced men in the sample.

Figure 4.11 shows the percentage of women in each cohort who are unmarried, married, widowed, or otherwise separated from their husbands. Aside from a small number of widows in their mid-30s, there are no widows under age 50. The data raise interesting questions about social mores, given the finding that five times as many men (70) as women (14) are reported to be separated from their spouse.

## Summary

In many respects, al-Anbar reflects patterns and characteristics found in many countries in the Middle East. It is a province of by large, extended family structures, and most households comprise four or more members. The population maintains traditional norms about women's status in society, and most Anbari women marry in their early 20s and have children. Also similar to trends in the broader Middle East is the fact that birthrates in al-Anbar have declined over the last 20 years and are continuing to do so.

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<sup>8</sup> Bear in mind that many men in their 20s have yet to be married. Axiomatically, no one should report an age upon first getting married that is greater than his or her current age.

## Employment

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The pattern of employment in Anbar Province is dependent on age and gender, as it is elsewhere in the Middle East, although differences are particularly stark in the province. Youth unemployment (calculated from the number who reported earnings during the survey week) is relatively high, and a reasonably “full” level of employment is not evident for males until age 30 and up. All things considered, unemployment rates in al-Anbar contrast with the higher figures for al-Anbar reported in the media and elsewhere. However, a number of surveys of Iraq, such as the 2004 survey and others that use large, randomly selected samples, have found results similar to those revealed by the 2009 survey. In all such surveys, actual unemployment rates are one-third or less of the figures cited by government officials and reported in the media, which hover between 40 percent and 50 percent. In a society where there is no safety net apart from the Public Distribution System (PDS), which provides food rations, necessity forces people to make money one way or another. In most instances, people opt for casual work or self-employment. The discrepancy between the claims of the Iraqi government and the media on one hand and, on the other, the results of large-scale surveys that used random sampling may be due to differences in definitions of *unemployment*. For example, Iraqi government officials may equate employment with a salaried (i.e., government) job and thus discount most private-sector self-employment, whereas other definitions may be more inclusive.

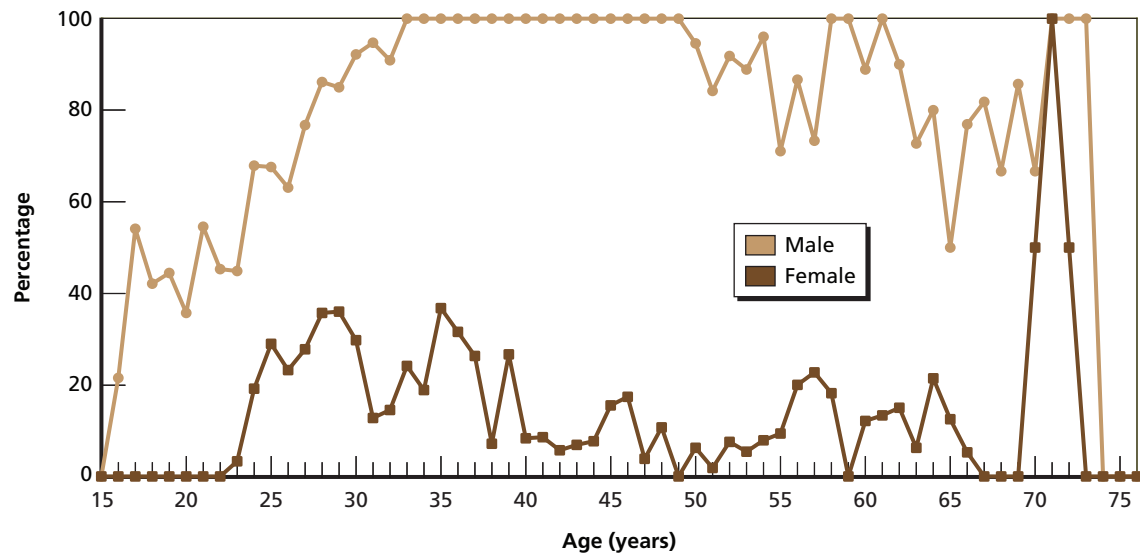
Figure 5.1 shows the percentage of individuals within each age cohort who were working as of May 2009. Every head of household, whether male or female, reported being employed in some wage-earning capacity. After the age of 50, male unemployment begins to rise, but this is due to older males leaving the employment pool. The oldest male who is looking for work was 57 years old.

Figure 5.2 shows the labor-force participation rate in May 2009 reported for men and women. In Iraq, some men begin to remove themselves from the labor force in their late 50s, but, unlike in the United States, there is no clear line that designates retirement (i.e., there is no age beyond which half of the men are no longer working). The data show that 90 percent of Anbari men age 65 and over are still working. However, one in every nine Anbari men over age 50 claims to have never worked.<sup>1</sup> All who reported that they are looking for a job are also among those who report never having worked. With one exception, everyone who reported being unemployed and not looking for a job also claimed to have never worked. Of those, 60 percent claimed to be “retired” (ostensibly, a contradiction) and the rest claim to be disabled.

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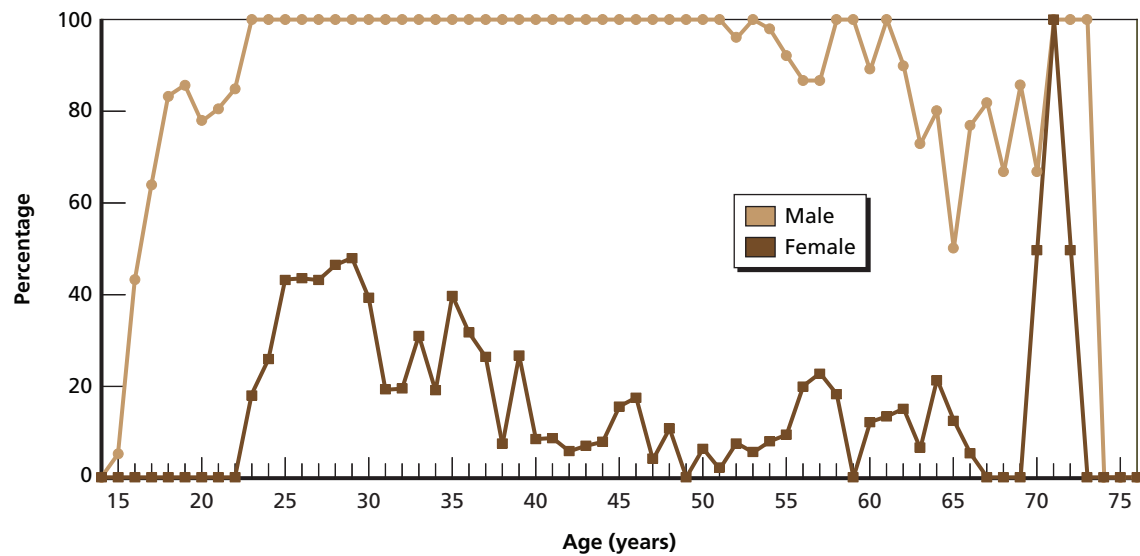
<sup>1</sup> All individuals were asked at what age they first started to work. Initially, we assumed that someone who gave no minimum age had never worked. However because the roster of people over age 50 without a current source of income was exactly equal to the roster of people over age 50 who have never worked, the question may not have been clearly understood.

**Figure 5.1**  
Percentage of Individuals with a Job in May 2009, by Age



RAND TR836-5.1

**Figure 5.2**  
Labor-Force Participation Rates, by Age



RAND TR836-5.2

The rate of female employment in al-Anbar is markedly lower than the rate of male employment, and almost all of the difference arises from women's much lower labor-force participation rate. Female labor-force participation peaks in women's 20s and then declines as children enter the picture. Figure 5.3 illustrates the sharp difference in the employment fate of women who become mothers with the fate of those who do not. (A comparison with the employment fate of similarly aged men is also provided.) The rate of working mothers under age 35 is well below 10 percent; for mothers age 35 and up, the rate hovers around 10 percent. Among those who are not mothers, the rise in the percentage employed somewhat parallels that of men of the same age, although it is significantly weaker. This is mostly due to differences in labor-force participation insofar as the unemployment rate for both groups (i.e., for men and for women who are not mothers) by age is similar. The oldest woman looking for work was 35 years old.

Figure 5.4 shows the percentage of households reporting a specific number of workers (i.e., income-earners). Every household reported at least one worker. Almost half reported having more than one. A few reported as many as nine.

Figure 5.5 shows how old individuals were when they first started working. In general, women started working later than men, and, on average, men and women who started working several decades ago began their first job at an older age than those who started working more recently.

Among the roughly 8,700 individuals who live in the 1,200 households surveyed, 533 can be categorized as both wanting to work and unemployed. Dividing this number by the total number who work or who reported that they want to work yields an unemployment rate of 20 percent, which is considerably higher than the 8 percent recorded for al-Anbar during the 2004 survey (before the extreme levels of violence experienced in 2005 and 2006).<sup>2</sup> The unemployment rate is 19 percent for males and 24 percent for females (16 percent for mothers and 28 percent for women who are not mothers). The overall unemployment rate is the same in urban and rural areas. Unemployment appears to be fairly concentrated: 40 percent of those looking for work reside in the 93 households in which multiple people are looking for work. For comparison, note that the 93 households with the largest number of employed people accounted for only 16 percent of the sample's total employed population. Slightly more than half of the unemployed are urban, which matches the total distribution of households in the survey. Figure 5.6 shows the number of unemployed by age.

Among those who are not looking for a job, only 3 percent do not fall into one of the following categories: too young to work, student, or housewife. Of the remaining 156 who are not looking for a job, 37 consider themselves retired or disabled, 98 are women who cited social restrictions against working, and 21 reported that they had "lost hope."

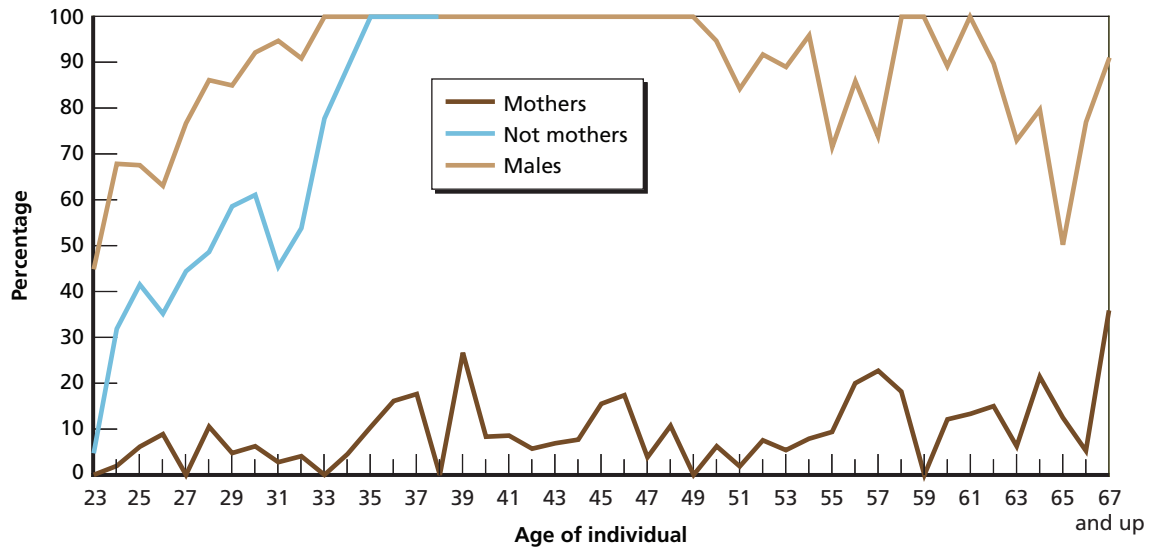
Respondents reported that unemployed Anbaris use a variety of methods to find work, as Table 5.1 indicates. Not supplied in the table are the following means, which no one reported having used: looking overseas, contacting the Iraqi Army, and contacting Coalition forces.

Figure 5.7 displays the distribution of young men among the following three categories: those working, those looking for jobs, and those who are out of the labor force.

The overall labor-force participation rate among males age 15 and up is 89 percent; in 2004, it was 66 percent. This change may account for the large difference in unemployment

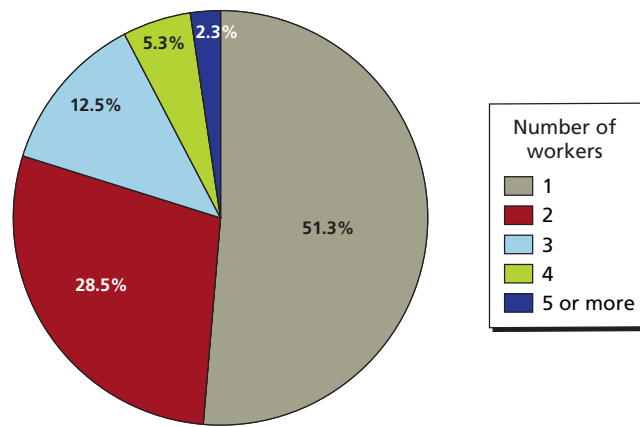
<sup>2</sup> The 2008 survey also revealed an unemployment rate of 8 percent, but that figure may have been based on respondents believing that considerable self-employment or work done for relatives is tantamount to full employment.

**Figure 5.3**  
Percentage of Individuals with a Job in May 2009, by Age/Age Group and Motherhood Status



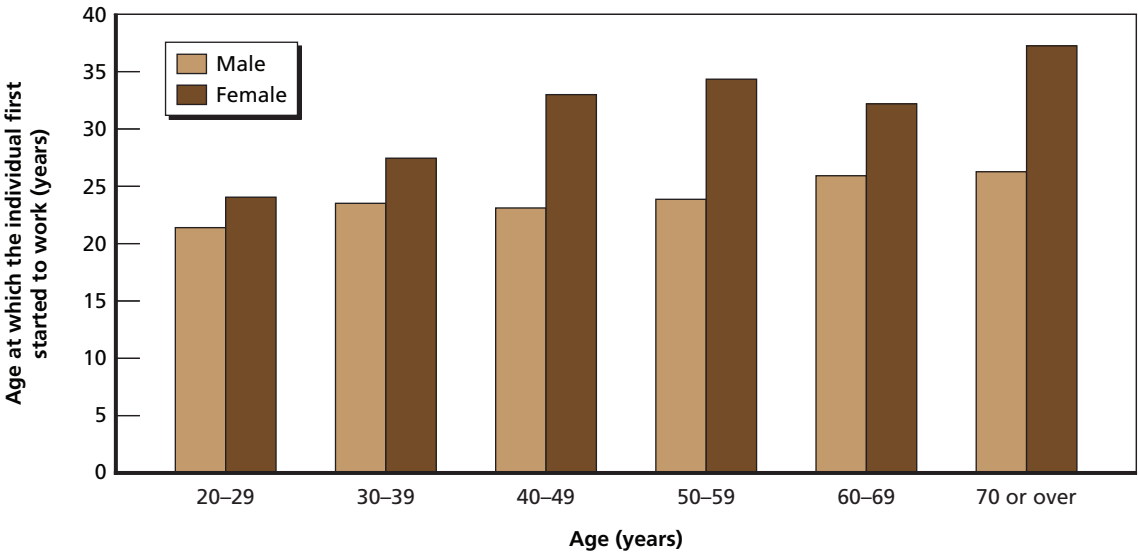
NOTE: Our sample included no nonmothers older than age 38, so we have no data beyond that age for that category.

**Figure 5.4**  
Percentage of Households Reporting a Specific Number of Workers



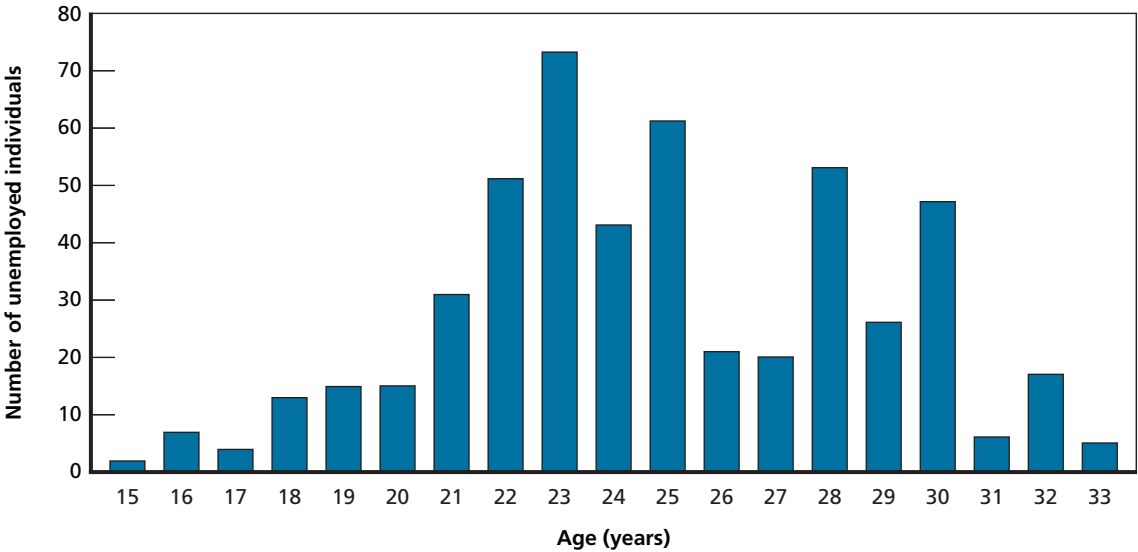
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**Figure 5.5**  
**Average Age at Which Individuals First Started to Work, by Age**



RAND TR836-5.5

**Figure 5.6**  
**Number of Unemployed Individuals, by Age**



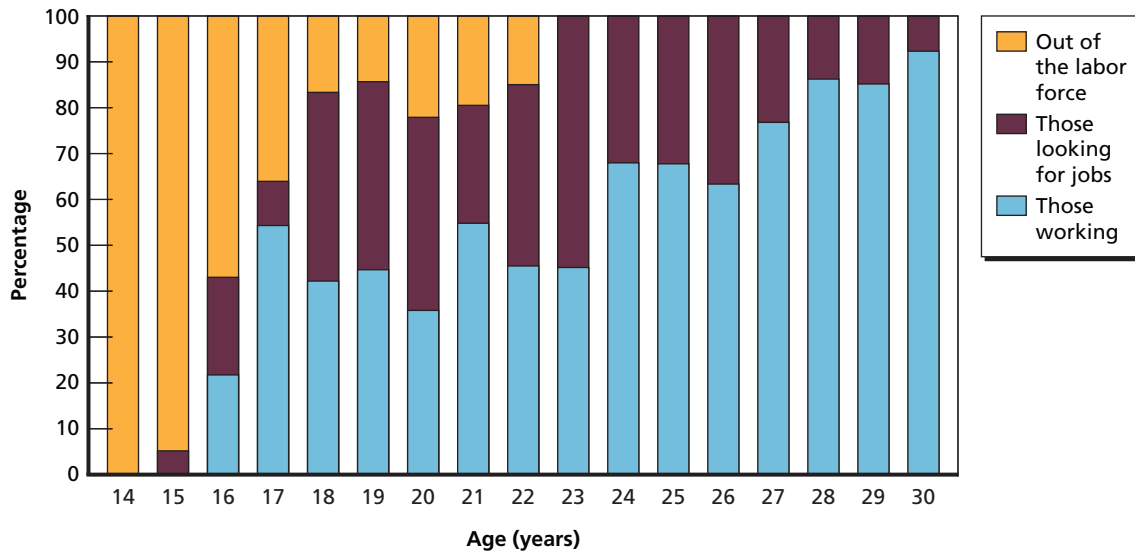
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**Table 5.1**  
**Means by Which Unemployed Anbaris Reported Having Searched for Work**

Means	Percentage
Asked friends or relatives	39
Applied directly to employers	23
Registered at a labor office	21
Responded to a newspaper advertisement	18
Contacted the local government	17
Contacted the national government	16
Tried to start their own business	10
Contacted an NGO	8

NOTE: The total exceeds 100 percent because many respondents reported using multiple methods.

**Figure 5.7**  
**Employment Status of Males Ages 16–23, by Age**



rates between 2004 and 2009: In earlier surveys, many young men without jobs indicated that they were not in the labor force, whereas young men unemployed in 2009 reported that they are in the labor force. Half of men who reported looking for work are also in school. The labor-force participation rate among women is highly sensitive to whatever age is considered the minimum age for employment. If the age of 23 is used—a number picked because no woman under age 23 is in the labor force—then the rate is 24 percent. Again, there is stark difference between mothers and women who are not mothers: 58 percent of childless women participate versus just 10 percent of mothers. Overall, al-Anbar's 2008 labor-force participation rates are on par with those of neighboring countries, except Turkey and Syria (where they are higher).

The vast majority of employed respondents work in the private sector (see Table 5.2). When asked what kind of institution they work for, respondents most often said one of the following: the private sector, local or national government institutions, NGOs, or other (e.g., the U.S. military). Once again, the urban-rural distinction is not significant. Female employment in state-owned firms, the local government, and NGOs is significantly higher than in private firms. Consistent with the tendency of older workers to be self-employed, the average age of those working for private firms and family businesses is significantly higher than in any other employment category. Employees of state-owned firms and local governments work fewer hours than employees in other categories.

Figure 5.8 shows another way to slice the employment pie. It shows responses to the question, "In what profession/occupation does . . . or did . . . work?" The results indicate that Anbaris hold occupations in various sorts of private-sector enterprises.

The rate of female employment in the private sector is much lower than that of males. As in 2004, the 2008 and 2009 surveys found lower labor-force participation rates among females than among males. Female labor-force participation ratios have been dropping in Iraq for several decades, possibly due to worsening economic conditions. In fact, female labor-force participation rates dropped from 41 percent in 1977 to about 37 percent in 1997.<sup>3</sup> These figures, however, are very sensitive to the minimum age at which an individual can be considered part of the potential labor force. Using the 15th birthday as the relevant cutoff, al-Anbar's female labor-force participation rate was 17 percent in 2004, 28 percent in 2008, and just 13 percent in 2009.

This paucity of female workers has more to do with low labor-force participation rates than with the lack of jobs. In al-Anbar, tribal traditions and religious beliefs restrict job opportunities for females, and this contributes to lower participation in the labor force among women. In some households, women may be prohibited from working by male heads of household because the labor force is considered "male space." Another factor may be that families fear that women will be exploited and harassed; these families are concerned for the safety of females, given the diminished rule of law. It is also difficult to simultaneously work and manage a large family, and this may also be a cause of low female labor-force participation.

However, the phenomenon of low female labor-force participation is not exclusive to al-Anbar or even to Iraq as whole. Middle Eastern countries exhibit, in aggregate, lower rates of female labor-force participation because women lack access to wage employment and to control over their wealth. Women depend on male heads of household and are granted limited control over economic decisions affecting themselves and family members. This is a function of

<sup>3</sup> Crane et al., 2009, p. 23.

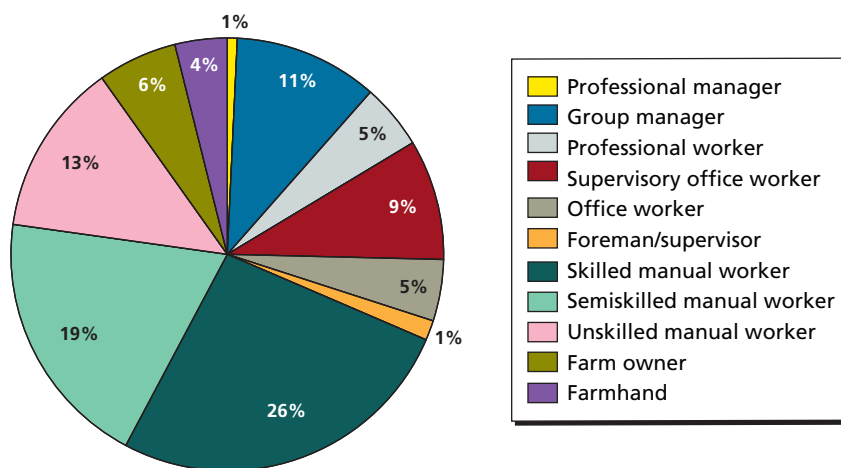


**Table 5.2**  
**Characteristics of the Employed, by Type of Employer**

Characteristic	Employer Category					
	Private/Joint Sector	State-Owned Firm	Local Government	NGO	Family Business or Private Household	National Government
Total	1,199	122	134	80	496	125
Urban	618	69	71	35	262	7
Rural	581	53	63	45	234	51
Male	1,073	85	100	25	457	65
Female	126	37	34	55	39	60
Average age (years)	38.1	31.8	35.0	28.2	41.0	30.1
Average hours worked per week	51.1	41.7	40.9	42.5	51.8	42.3
Average weekly wages (dinars)	193,600	138,100	147,800	126,900	189,300	131,400
Underemployed	446	51	54	38	165	43

NOTE: Ministry of Planning and Development Cooperation, 2005, found that 62 percent of people who were employed worked in the private sector (vs. 76 percent in the 2008 survey), 29 percent worked in state-owned firms (vs. 16 percent in the 2008 survey), 0 percent worked in the local government (vs. 5 percent in the 2008 survey), 4 percent worked in NGOs (vs. 3 percent in the 2008 survey), and 5 percent worked in "other" or unspecified categories (vs. 2 percent in the 2008 survey). The interviewer asked, "For what type of employer does household member x, y, z work? A state-owned company, a private company, a cooperative, a joint-sector business, the Iraqi Army, a family business, an NGO, a private household, or other?"

**Figure 5.8**  
**Job Types Held by Respondents**



RAND TR836-5.8

the interaction of tradition, norms and customs, and economic structures in the Middle East. When women do have access to employment opportunities in the Middle East, the professions are typically only in fields deemed “acceptable,” such as education and health care. These findings are reflected in the 2009 survey data and elsewhere.<sup>4</sup>

The same norms that restrict overall female labor-force participation discourage females from working in the private sector. Women tend to be confined to working in family businesses, and this is particularly true of rural women, who are active in farming. Outside of family businesses, the jobs considered most acceptable for women are in government, education, and nursing.

Yet, disparities in labor-force participation appear to have little bearing on the desire to work among men and women alike. As many as 383 male and female household members (roughly one of every six employed) indicated a desire to work more hours. Those who want to work more hours work, on average, 47.7 hours a week, only somewhat less than the average of 49.6 hours a week worked by those who reported no such desire. An employed person is more likely to want more hours if he or she is not a household head (26 percent) than if he or she is a household head (11 percent). Those who want to work more hours are generally younger (with an average age of 32) than those who are satisfied with their hours (with an average age of 39). The places of work of those who would like to work more hours are, on average, smaller (employing an average of 8 people) than those of respondents who do not wish to work more hours (employing an average of 9 people). Finally, everyone who wants to work more hours reported actively seeking out more work.

One way to assess the nature of employment is to ask respondents whether they are employees of nonfamily businesses, employees of family businesses, employers of non-family members, or self-employed (a category that includes employers of family members). Table 5.3 shows respondents’ answers in 2009.

<sup>4</sup> See, for example, Roudi-Fahimi, Farzaneh, and Valentine M. Moghadam, *Empowering Women, Developing Society: Female Education in the Middle East and North Africa*, Population Reference Bureau, November 2003.

**Table 5.3**  
**Characteristics of the Self-Employed, Employers, and Employees**

Characteristic	Employment Category		
	Self-Employed <sup>a</sup>	Employer	Employee
Total	760	618	778
Urban	398	315	416
Rural	362	303	362
Male	671	543	591
Female	89	75	187
Average age (years)	42.3	42.9	28.4
Average hours worked per week	52.4	52.0	44.0
Average weekly wages (dinars)	211,000	217,000	122,000

<sup>a</sup> Includes those who employ only family members and those employed by family members.

Employers and the self-employed share similar characteristics. Both work long hours (more than 50) compared with employees (44); both are older (over 40 years old) than employees (28 years old). The former also earn far more money per week (more than 200,000 dinars) than do employees (122,000 dinars). Women are underrepresented among the employers and the self-employed, but this may reflect the fact that women tend to be in the workforce only in their 20s whereas men remain in the workforce almost their entire lives. No interesting urban-rural distinctions emerge from the data.

## Summary

Unemployment rates are generally highest among the young in al-Anbar, with full employment typically not achieved until males have reached their mid-20s, a pattern also found in 2008. The labor-force participation of females is largely concentrated among those who have not had children, most women are married before they have their first job, and roughly 5 percent of mothers (even mothers of grown children) are in the labor force. The Western norm of steady, full-time work in one job is not the predominant pattern in al-Anbar: No more than 40 percent of all those who work characterize themselves as employees.

## Income and Standards of Living

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Iraq's recent history of frequent wars has combined with large swings in oil revenues to create sharp fluctuations in average income and standards of living across the nation. Like many oil-exporting countries, Iraq experienced strong economic growth in the 1970s, attaining the status of a middle-income country due to increased oil exports and higher prices in the 1970s compared with the 1960s.<sup>1</sup> However, the Ba'athist regime's economic policies retarded economic growth by introducing severe economic distortions that fostered corruption while increasing economic inefficiency. Nevertheless, the regime did use part of the increase in oil revenues to expand citizens' access to public services.<sup>2</sup>

As mentioned in the previous chapter, Iraq's economy was severely strained by the 1980–1988 Iran-Iraq War, the 1990–1991 Gulf War, and UN sanctions. Although economic statistics were severely distorted during the 1990s, making it very difficult to measure even rough changes in household incomes,<sup>3</sup> it is clear that standards of living deteriorated dramatically during this period, as did indicators of human development. The share of the population living in poverty rose sharply.<sup>4</sup>

RAND survey findings from 2008 and 2009 indicate that the economic situation in al-Anbar appears to be improving steadily. This is likely due to improvements in stability that have facilitated the much-needed resuscitation of economic growth in this formerly battle-plagued province. Significantly, Anbari incomes rose between 2004 and 2008 and then continued to rise into 2009. Moreover, as in 2008, wage rates for women in 2009 were on par with those of men. In a sign that banking institutions are also perceived as more-viable sources of financial security, a somewhat larger percentage of respondents in 2009 reported using bank accounts to save their funds than in 2008. Otherwise, the preponderance of the population keeps its wealth in gold. However, opportunities for raising money using personal reserves appear to have broadened since 2008. More than 50 percent of respondents reported that they can access money on their own in a pinch, an increase over the 2008 figure of 30 percent. A closer look at the data provides more-nuanced results. We start with an examination of income.

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<sup>1</sup> World Bank, "Iraq," web page, copyright 2009.

<sup>2</sup> Phebe Marr, *The Modern History of Iraq*, Boulder, Colo.: Westview Press, 2004, p. 164.

<sup>3</sup> Amatzia Baram, "The Effect of Iraqi Sanctions: Statistical Pitfalls and Responsibility," *Middle East Journal*, Vol. 54, No. 2, Spring 2000.

<sup>4</sup> World Bank, "Country Brief: Middle East & North Africa—Iraq," August 2006.

## Income

Data on earnings are of two types. The first, earnings data for *individuals*, is based on a pair of two-week intervals: the last two weeks of December 2007 and two weeks in May 2009. The second set is for *household* income (i.e., earnings plus transfers and sales of personal property). Household income was measured for two weeks in May 2009, using total earnings (by category). Household income for 2008 was measured for the entire year (by category).

Each household was asked about the wages earned by each employed household member during the most-recent weeks prior to the survey. The results show that individual wages in al-Anbar rose sharply between late 2007 and May 2009 (see Figure 6.1). Per-person rural weekly wages (averaging 180,000 dinars) and per-person urban weekly wages (averaging 181,000 dinars) were virtually identical.<sup>5</sup> All respondents were paid in dinars in May 2009, which was also true in late 2007. By contrast, the 2008 survey showed that 30 individuals were paid in U.S. dollars in 2008.

Data from 2009 show that weekly wages are clearly correlated with age. On average, those under age 23 earn less than half of what their seniors make, but, upon reaching the age of 24, their wages rise toward levels associated with mature men. Wages plateau for those in their late 20s, sink a bit in their 30s, and peak for those in their 40s. Wages decrease slightly for those in their 50s and then more precipitously for those in their 60s and up. The temporary rise in wages for those in their late 20s may reflect the additional demand created by the expansion of local police forces, which draw predominantly from that age cohort. Data for December 2007 echo this overall pattern but show no local peak in wages for those in their late 20s. Overall, weekly wages went up significantly between December 2007 and May 2009 for all age groups but most robustly for those in their late 20s.

In the aggregate, weekly wages went up 37 percent in the 17 months between December 2007 and May 2009. However, that aggregate conceals a wide variety of outcomes. Figure 6.2 illustrates the spread.

Women's wage rates are surprisingly close to those of men. Counting all respondents, the average weekly wage is 182,000 dinars for men and 175,000 dinars for women. As Figure 6.3 shows, when wage rates are calculated by age—most women in the workforce tend to be in their 20s—one sees that women's wages are higher than men's early on but that they do not rise as quickly as men's wages as women (if they remain in the workforce at all) reach their 30s and 40s.

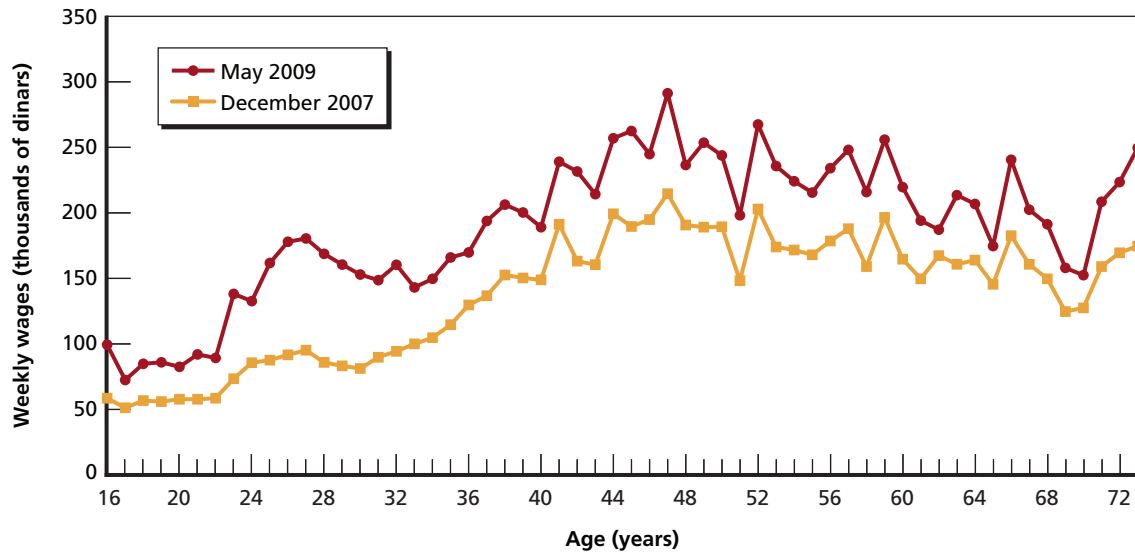
Urban-rural distinctions in household wages (i.e., the sum of the wages of all the household members) are not pronounced. On average, urban households have slightly lower aggregate job-related incomes (i.e., wages, in-kind goods, earnings from seasonal labor, and other sources) than do rural households: 435,000 dinars every two weeks versus 456,000 dinars every two weeks, respectively.<sup>6</sup> Figure 6.4 provides a breakdown of earnings by type of income. Wages account for about half the pie, and home production and seasonal farm labor constitute most of the rest.

Figure 6.5 shows similar share-of-earnings data for the whole of 2008. (Note that there are additional categories for types of income that generally accrue over the course of a year

<sup>5</sup> These figures include cash earnings and are roughly equal to \$180.

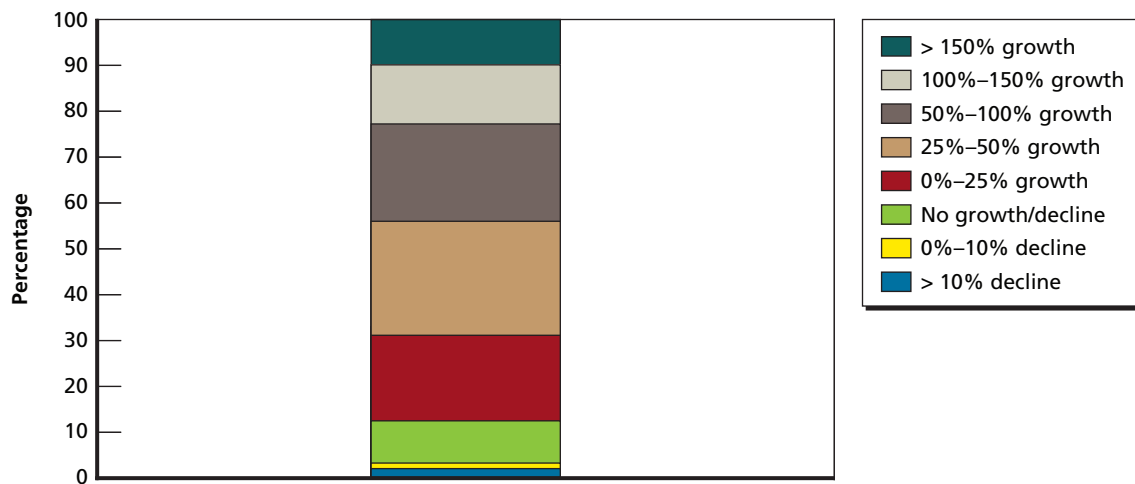
<sup>6</sup> These amounts are roughly equal to \$400.

**Figure 6.1**  
Weekly Wages in May 2009 and December 2007, by Age



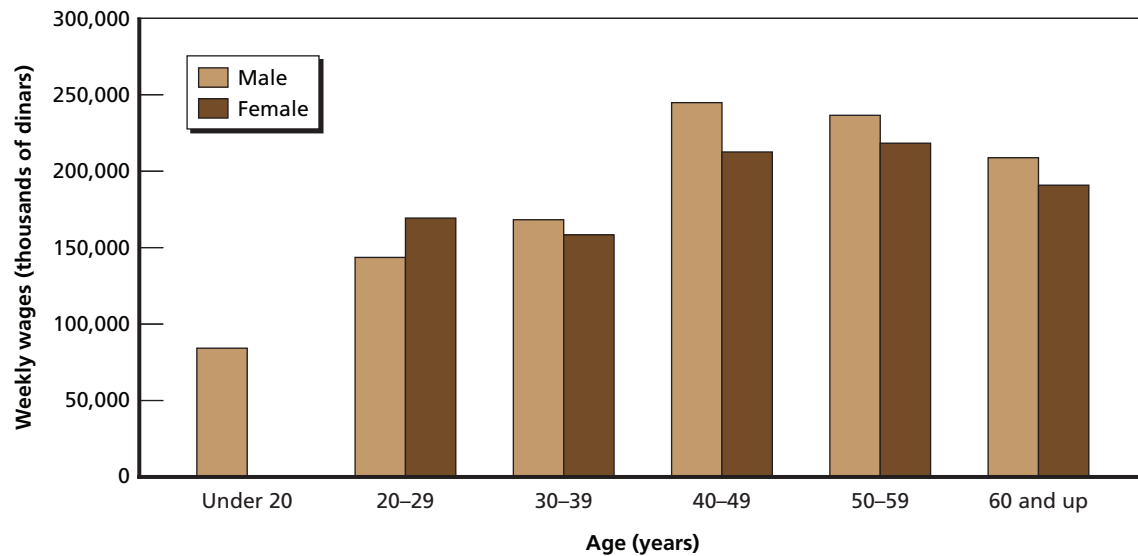
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**Figure 6.2**  
Increase/Decrease in Wages Between December 2007 and May 2009



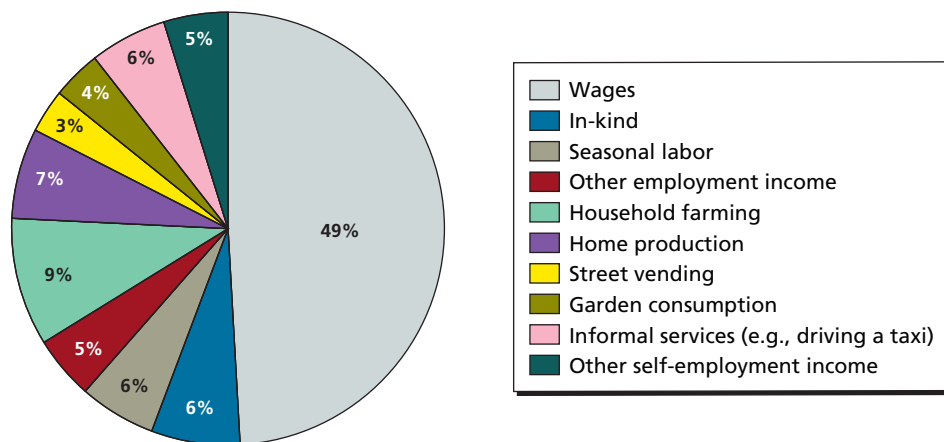
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**Figure 6.3**  
Men's and Women's Weekly Wages in May 2009, by Age



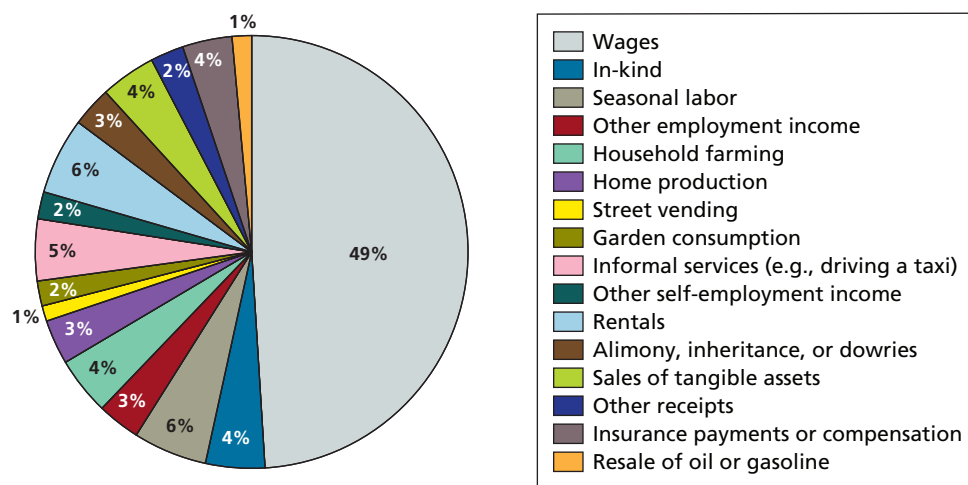
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**Figure 6.4**  
Share of Earnings in May 2009, by Income Type



RAND TR836-6.4

**Figure 6.5**  
Share of Earnings in 2008, by Income Type



RAND TR836-6.5

rather than over one or two weeks.) In-kind income from sales related to gardening and other agricultural activities is important to many households.

However, although all households earned wages, no more than a quarter of the population reported receiving income during either period from other sources, such as farming, street vending, or home production activity, as Figure 6.6 relates.

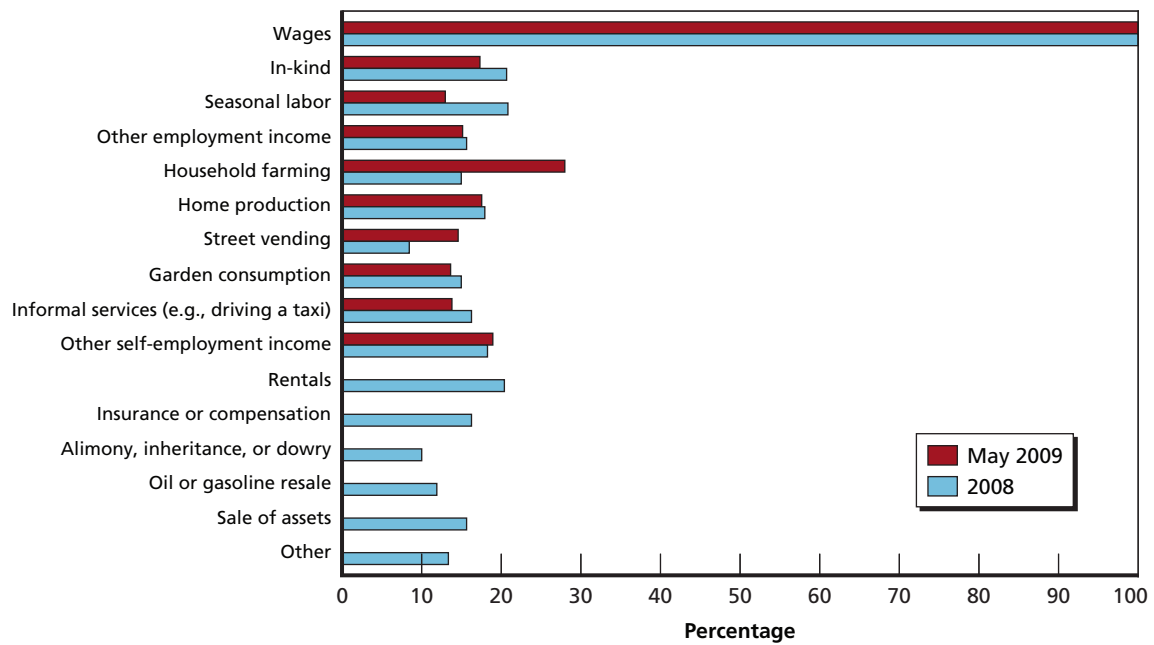
In the 2009 survey, all households had received some income from being employed. Roughly 30 percent received all of their income from employment (see Figure 6.7).

In 2009, 83 percent of surveyed households reported receiving food rations, a decline from 2008's figure of 92 percent.<sup>7</sup> Of the households that reported receiving food rations in 2009, 80 percent acquired the rations from the government; in 2008, 100 percent of such households received rations from the government. As Figure 6.8 suggests, Anbaris have access to multiple sources of food rations, including secular and religious organizations. Three-quarters of all households that reported getting food rations consumed them within the household, but one-quarter redistributed the rations to family or neighbors they deemed needier. Interestingly, every household that redistributed the rations received its rations from government sources only; perhaps it was the neediest that sought rations from nongovernment sources, and being the most needy, had none left to redistribute. Note that, due to mismanagement and corruption, the quality of food provided by the Ministry of Trade in PDS baskets is rather low. As a result, many households sell their rations, give them away, or buy better-quality food. It appears that the quality of rations provided by nongovernment sources is higher and that such rations are therefore less likely to be given away. Among households that received rations, 15 percent reported having received rations within the last week, 15 percent had not received food rations within the last three months (or had forgotten when they had last received rations), and the remaining 70 percent had last received rations at some point between a week ago and three months ago. Rations are very important to Anbaris' survival. About 40 percent reported that they rely so heavily on food rations that they would have to cut down on the amount they eat in the absence of rations.

<sup>7</sup> In Ministry of Planning and Development Cooperation, 2005, al-Anbar stands out among other provinces because only 82 percent of all households reported receiving food rations. The rate the country as a whole was 96 percent.

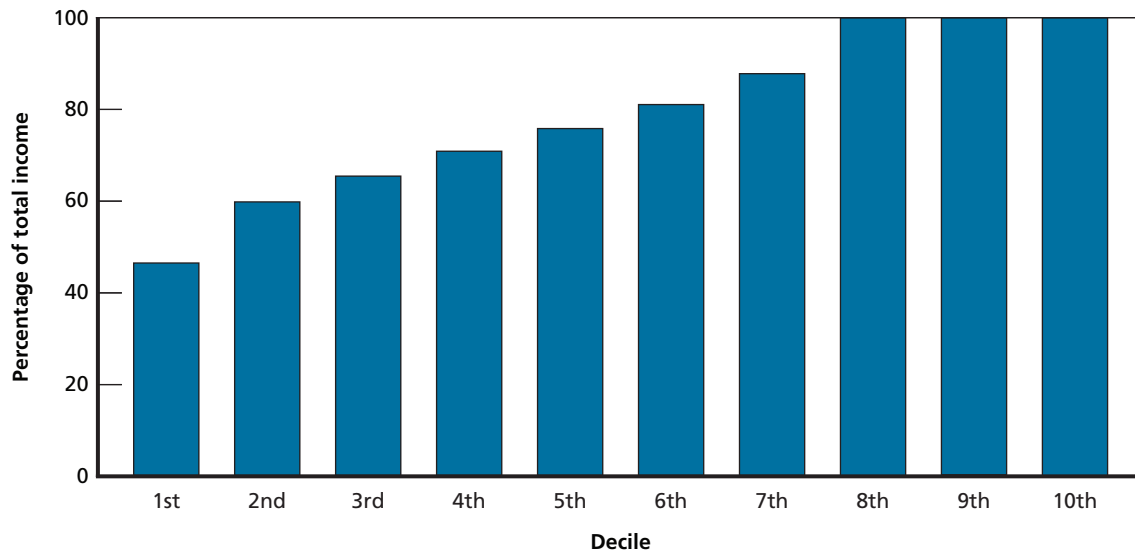


**Figure 6.6**  
Percentage of Households That Reported Receiving Money from a Specific Activity



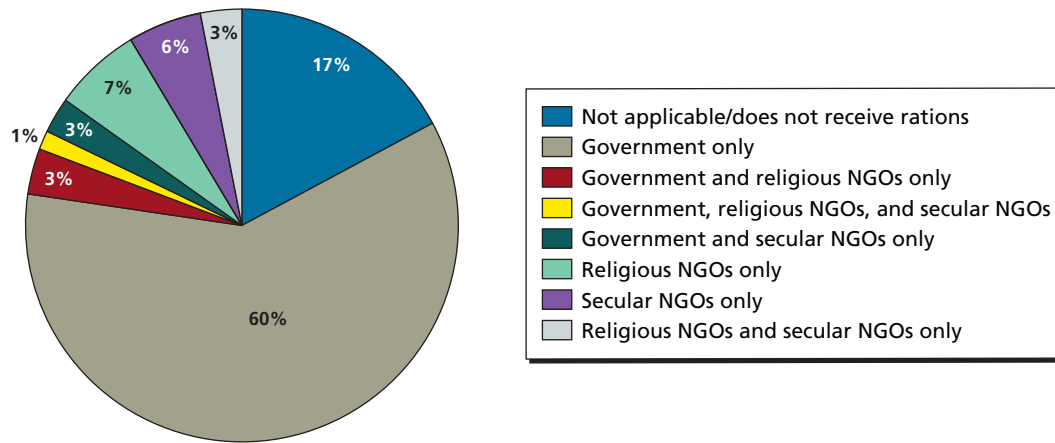
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**Figure 6.7**  
Labor Earnings as a Percentage of Total Income, by Decile



RAND TR836-6.7

**Figure 6.8**  
Sources from Which Households Received Food Rations



RAND TR836-6.8

Figure 6.9 shows the growth of household income between 2007 and 2008. Most households saw at least some income growth (some of which can be attributed to inflation); the median increase was 23 percent.

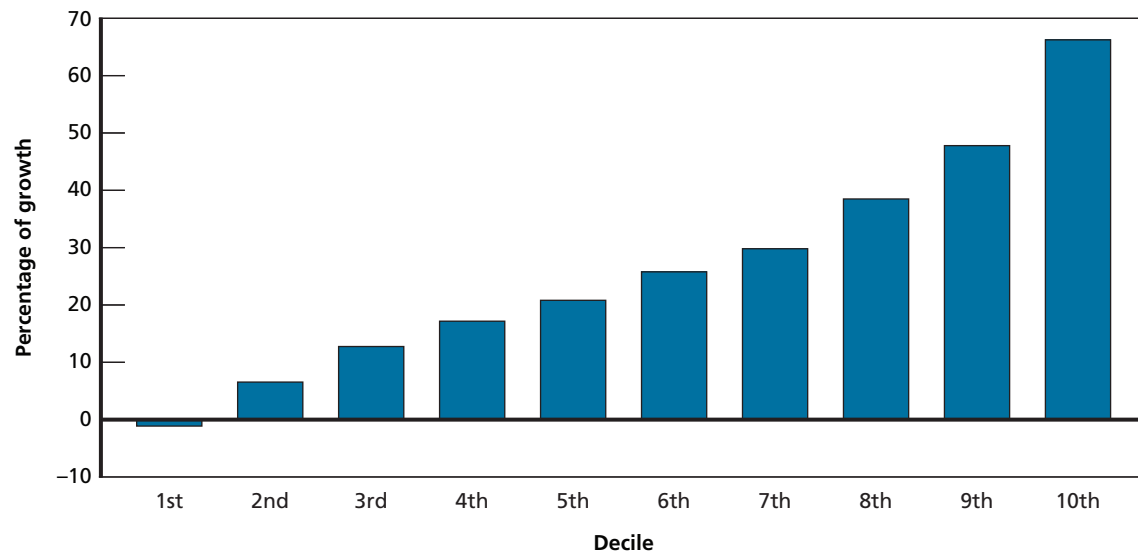
Survey results suggest that the distribution of income from all sources is fairly equal. That is, the poorer half of respondents received a higher percentage of the province's overall income than is usually the case in underdeveloped countries. If anything, incomes were more equal in 2008 than in 2007. In 2007, the average household income of those on the lower half of the income scale was 70 percent of the provincial average; in 2008, it was 71 percent (i.e., essentially unchanged).<sup>8</sup> Figure 6.10 illustrates the ratio between average provincial incomes and the incomes of the poorest 10 percent, the next-poorest 10 percent, and so on. The figure shows that, for instance, in 2007, the poorest 10 percent of households earned 37 percent of the provincial average whereas, in 2008, the poorest 10 percent of households (which were not necessarily the same households as those in the 2007 data) earned 42 percent of the provincial average.

Finally, Figure 6.11 shows the influence of education on sources and levels of income. Higher education levels are not correlated with higher incomes or even with a higher percentage of income arising from earned income: wages, in-kind payments, seasonal income, and other employment income.<sup>9</sup> This is common in developing countries, where higher unemployment rates and lower wages for the better educated are common. The average percentage of an individual's income arising from wages alone was in the 60–63 percent range for individuals

<sup>8</sup> These numbers should be read with caution. Iraqis avoid disclosing high incomes for security reasons. Conversely, it is embarrassing for Iraqis, and especially Anbaris, who enjoyed special favor during the era of President Saddam Hussein, to admit that they are poor. By way of contrast, data from the 1970 U.S. census show that similar figures for U.S. metropolitan areas in 1970 ranged from 41 percent to 53 percent.

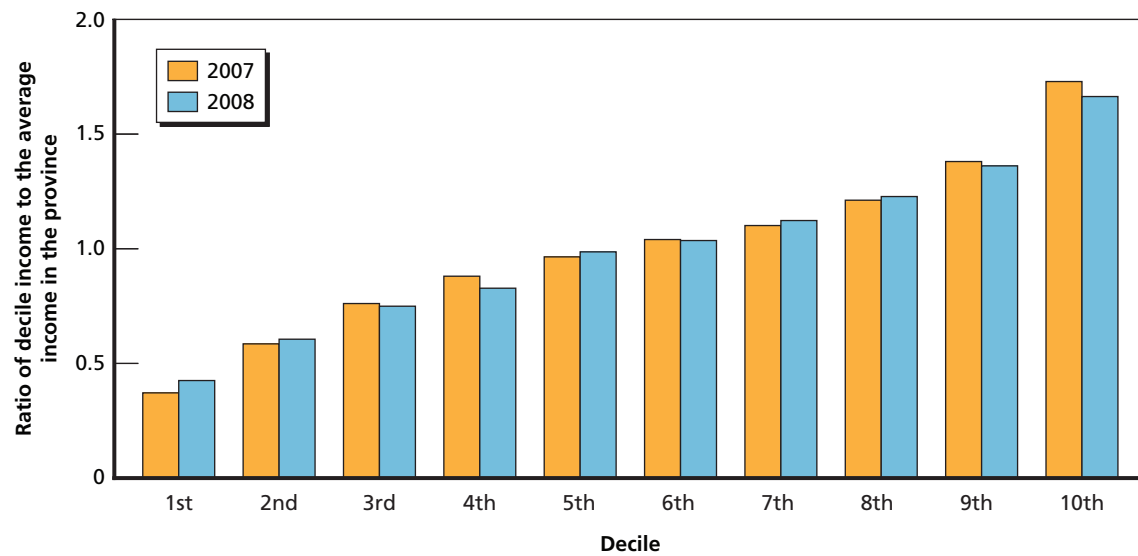
<sup>9</sup> Compared with developing countries, in al-Anbar, education is not considered as great a determining factor in finding a good job or securing a high annual income. Conversations with experts on Iraq in 2008 and 2009 suggest that connections to a tribe or to the Anbar Salvation Council, relations with political parties, and knowing the right people are more-effective ways of acquiring jobs and negotiating a good salary. There are poorly educated people who own large companies or head major divisions in al-Anbar.

**Figure 6.9**  
Growth in Real Income Between 2007 and 2008, by Decile



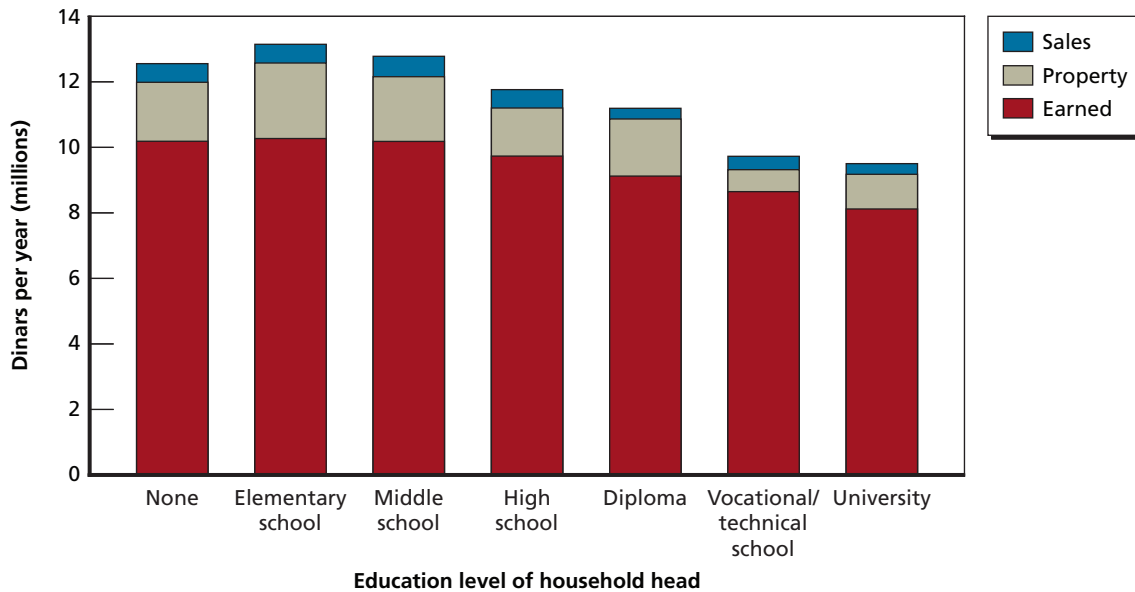
RAND TR836-6.9

**Figure 6.10**  
Income, by Decile, as a Ratio of Average Income



RAND TR836-6.10

**Figure 6.11**  
**Source of Average Annual Income, by Education Level of Household Head**



RAND TR836-6.11

with no education, some education, and a university education. The exception was among those with only a vocational education—where the percentage was 67 percent.

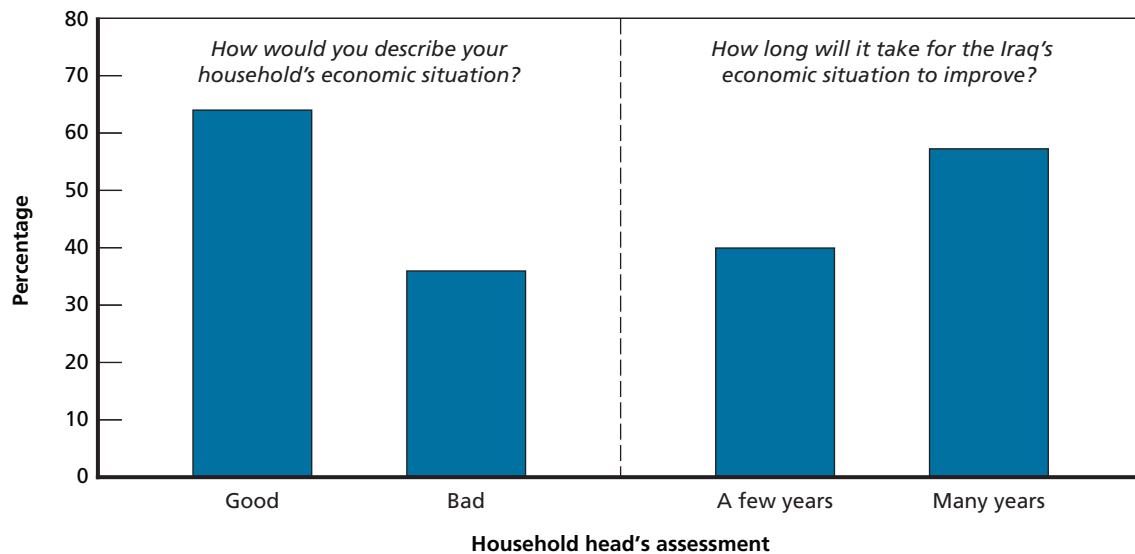
## Standards of Living

When asked to share their views on the economic situation, most respondents provided generally positive evaluations of their household economic status. Well over half describe their household's overall economic situation as good (64 percent), but a still-sizable portion (36 percent) believes their overall situation is bad. Anbaris are fairly pragmatic about the prospects improving their country's overall economy: No one believes that measurable economic improvement will occur very quickly (i.e., within a few weeks or months), and most believe that it will take a matter of years (see Figure 6.12). There is no correlation between how households described their own economic circumstances and whether they believe that that improvement will come sooner rather than later.

Two things are most striking about these responses. The first is the complete absence of household heads that identified their household economic situation as very good. The second is the complete absence of household heads that believe that economic conditions will improve any time soon. The percentage of respondents who believe that the situation will improve in a few years (40 percent) is roughly equal to the percentage who believe it will take many more years (56 percent); the rest were unsure. Whether all this represents actual conditions in al-Anbar or simply local pessimism cannot be determined.

Based on questions regarding what households can afford, the typical Anbari household seems to be struggling but also possesses elements of Iraqi middle-class status. As shown in Figure 6.13, at least half of households say that they can afford to pay for all of the items

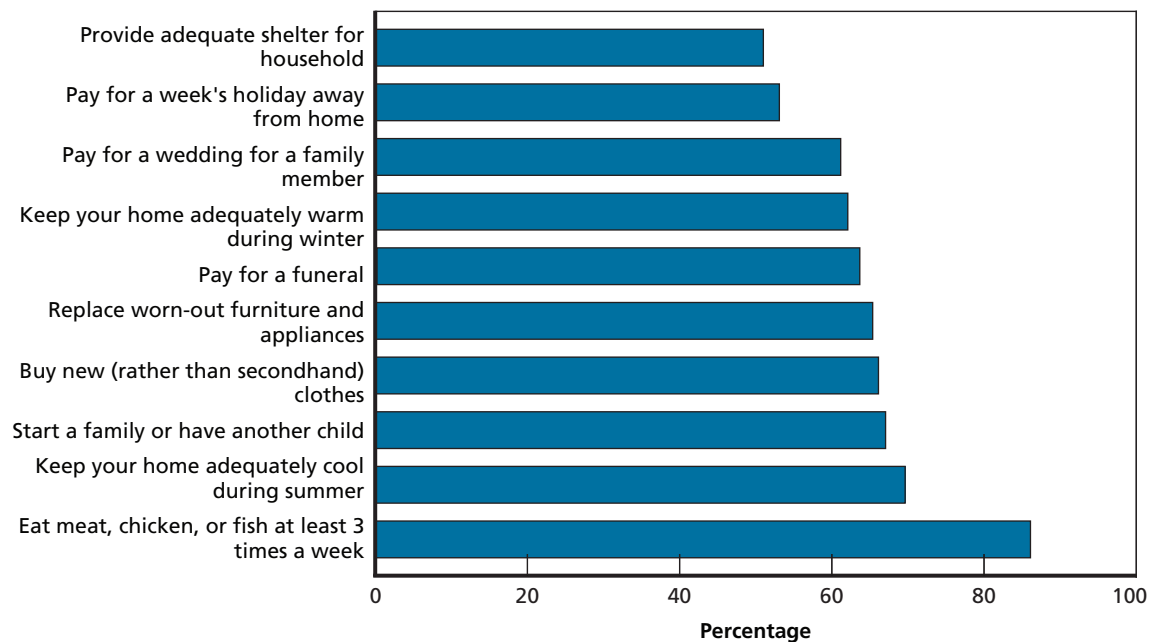
**Figure 6.12**  
**Assessments of the Household's Economic Situation and the Outlook for Iraq**



NOTE: No respondents consider their household situation very good, and no respondents believe that the province's economic situation will improve within weeks or months.

RAND TR836-6.12

**Figure 6.13**  
**Percentage of Households That Can Afford a Particular Item**



RAND TR836-6.13

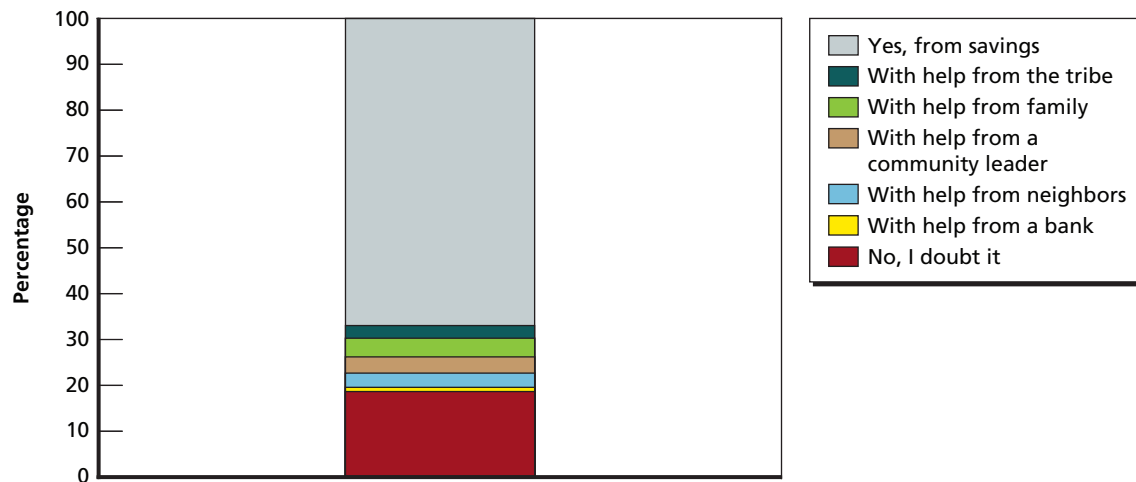
they were asked about, from eating a protein-adequate meal every other day to providing adequate shelter for their family. However, only less than 60 percent could afford items beyond a protein-adequate meal every other day. About 30 percent of all households can afford all 10 of the purchases mentioned. The other 70 percent could afford only some of them (for example, 50 percent can afford only about five items). Only five households out of the 1,200 surveyed can afford none of the items.

As a rule, Anbaris do not have much in the way of savings. Just over 30 percent of all households reported having a bank account (up from 20 percent in 2008).<sup>10</sup> More households (44 percent) keep part of their wealth in gold or other precious metals.

The struggle to save money may affect Anbaris' ability to raise money quickly. As Figure 6.14 indicates, when asked whether the household could acquire 200,000 dinars (roughly \$200) within a week, two-thirds of respondents felt that they could do so using their own savings; one-third felt that they could, in effect, borrow the money; and the remainder felt that they could not.<sup>11</sup> This is a considerable improvement over 2008, when only one-third of respondents felt that they could raise the money without assistance. It is unclear whether the improvement reflects rising incomes; the effect of inflation, which has made 200,000 dinars worth less in 2009 than in 2008; institutional change (e.g., in the province's banking system); or the fact that people have assets so bankers will lend to them.

Finally, Anbari households were asked about whether they had received assistance from abroad, from religious institutions, from the government, or other sources. All but eight households reported that they had received assistance from some institution or individual, and the

**Figure 6.14**  
**Could You Raise 200,000 Dinars in a Week?**

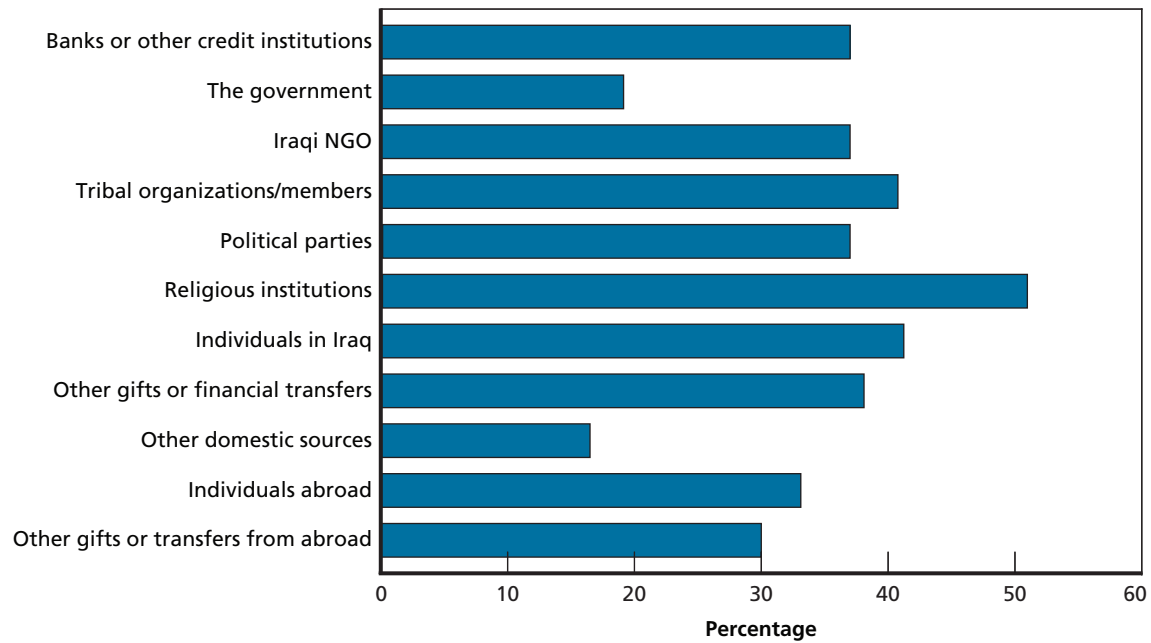


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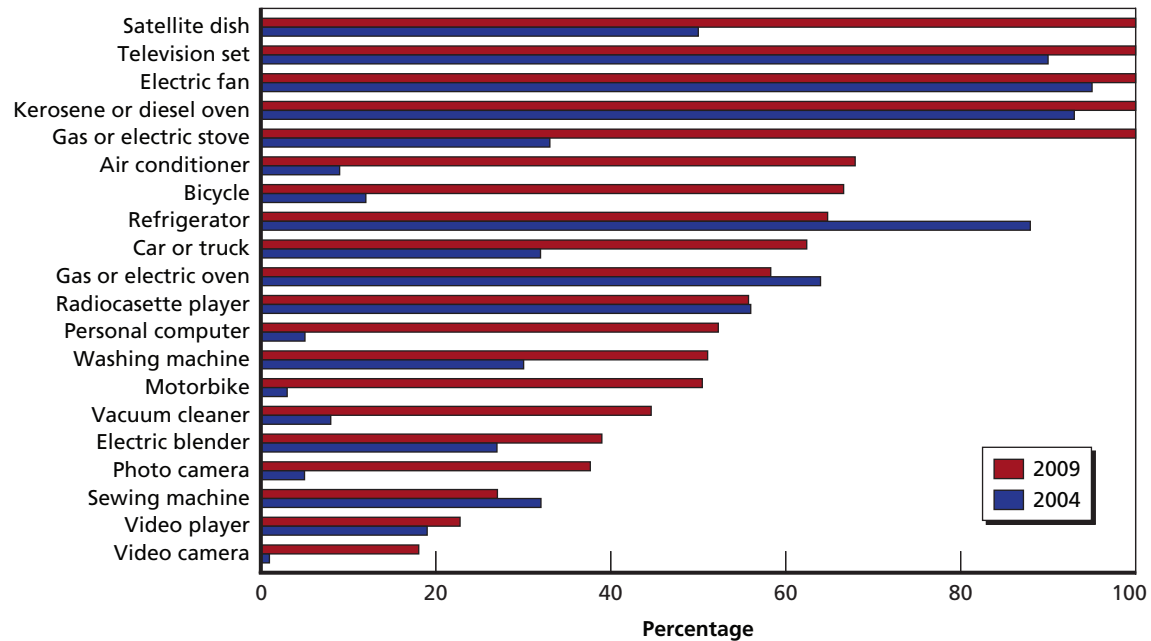
<sup>10</sup> The weakness of the banking sector arose, in part, during the 1990s, when the Iraqi currency depreciated sharply and those who had bank accounts lost the value of their savings. Iraqis view the purchase of big-ticket items, such as vehicles, real estate, or foreign currency, as a better way of saving money than using savings accounts. Foreign currency is usually kept in safe places in the home. Women may use jewelry, especially gold jewelry, as a form of savings.

<sup>11</sup> In 2004, respondents were asked a similar question about a somewhat smaller sum of money. At the time, 22 percent of Anbari households said that they could raise the money without assistance, 46 percent said that they would need help, and 32 percent said that they had serious doubts that they could raise the sum.

**Figure 6.15**  
**Percentage of Households That Had Been Offered Assistance from a Particular Source**



**Figure 6.16**  
**Percentage of Households That Own at Least One of a Particular Type of Household Item**



mean number of sources of assistance per household was three. Figure 6.15 shows the sources of assistance and what percentage of households had used them.

Although Anbaris are not affluent, the penetration of consumer durables into households is quite high (see Figure 6.16). Every household surveyed reported ownership of a satellite dish, television, electric fan, and oven. Most households also own air conditioners, bicycles, and motor vehicles. Perhaps more significantly, even personal computers and cars or trucks—quintessential symbols of affluence—can be found in more than half of all the surveyed households.

Anbari households report using private vehicles almost half the time when making personal trips. As Figure 6.17 indicates, owning a personal vehicle seems to have only a modest effect on whether a household uses a car to make personal trips.

Mobile phones have become increasingly characteristic of the developing world, where they are far more prevalent than landlines. Al-Anbar is no exception. Most respondents do not have a landline, and most of those who do complain of unstable connections (see Figure 6.18). By contrast, every household reported owning a cellular phone, and 40 percent reported that their cellular-phone connections are stable.

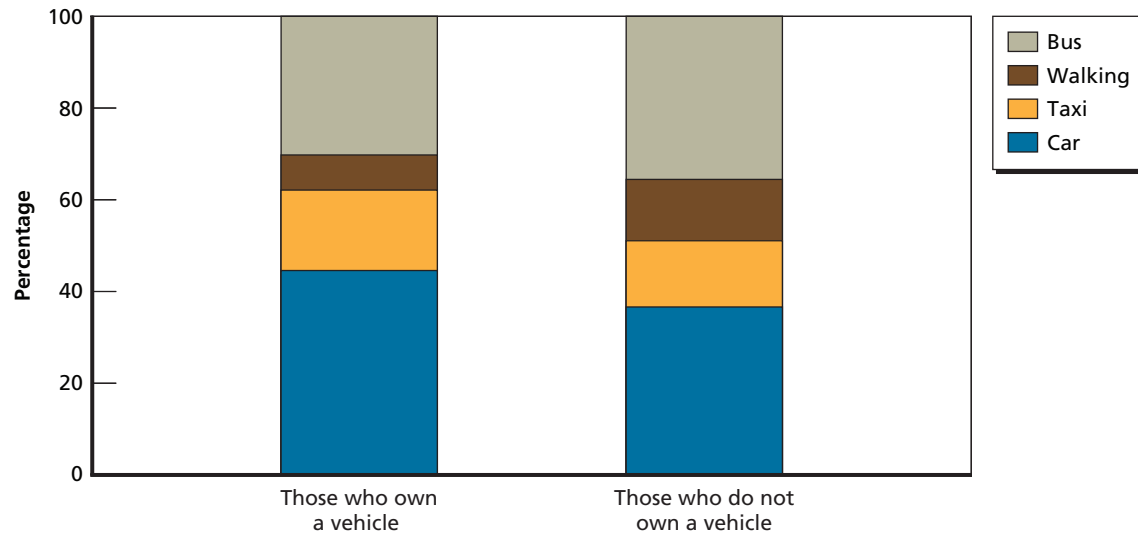
Although more than half of respondents reported having access to a personal computer, very few have their own Internet connections. Almost every household has some access to the Internet, but, for the most part, members acquire access by visiting a cybercafé (see Figure 6.19). Indeed, owning a computer has only a modest effect on how people access the Internet, and many people who do not own computers use the Internet (just not at home). Since 2008, there has been a significant shift away from cybercafés and toward using computers owned by friends. Otherwise, patterns of ownership and access in 2009 are similar to those in 2008.

## Summary

Al-Anbar's economy is in recovery, but it is far from robust. Wages have been rising since 2006 across the board, and, unlike in 2008, households no longer have to sell their assets to get by. Despite difficult job conditions, respondents reported that they have begun to enjoy a higher material standard of living. Most can afford some the accoutrements of middle-class life, such as eating meat several times a week and keeping their house adequately heated and cooled. Every household has access to a cell phone, most own some electronic goods, and half own a vehicle. Banking institutions are undeveloped, and many households keep their wealth in gold, but most could access 200,000 dinars (roughly \$200) if they had to. Nevertheless, Anbari households depend on various types of assistance (especially Iraqi government food rations), although to a lesser degree than in previous years.

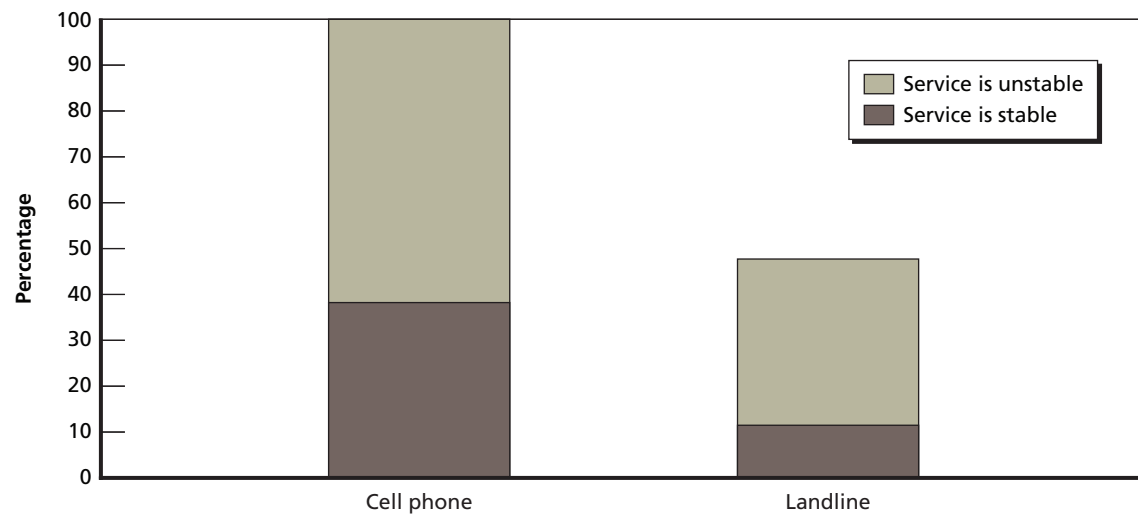


**Figure 6.17**  
**Mode of Transportation Used for Personal Trips**



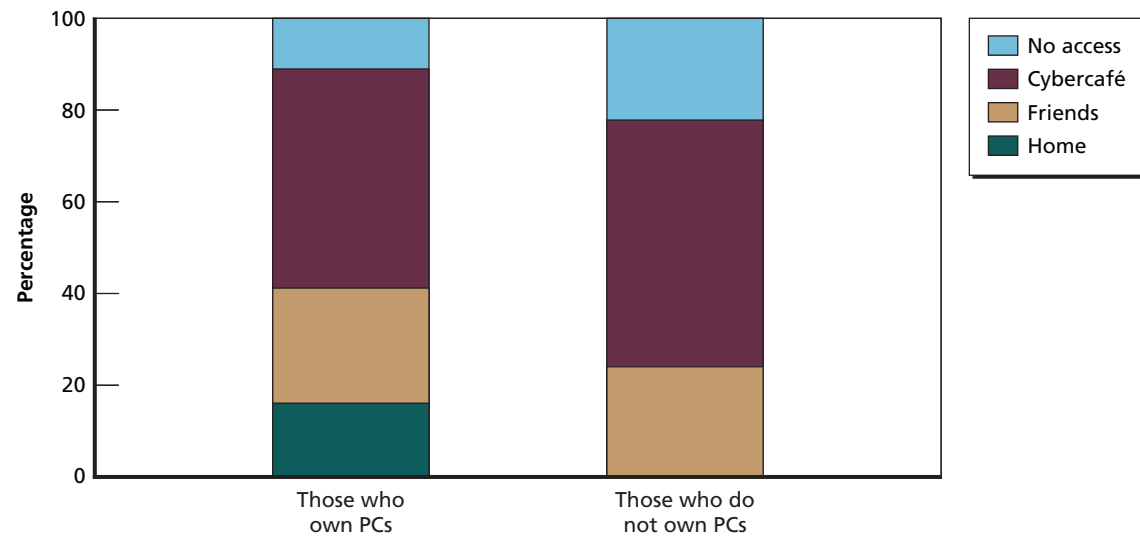
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**Figure 6.18**  
**Number of Households with a Cell Phone or a Landline**



RAND TR836-6.18

**Figure 6.19**  
**How Households Access the Internet**



RAND TR836-6.19



## Education

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Iraq was once regarded as having one of the most developed educational systems in the Arab region. Before the Iran-Iraq War, the Iraqi government spent 6 percent of its gross domestic product and 20 percent of its total budget on education, spending an average of roughly \$620 per student.<sup>1</sup> Tens of thousands of schools were built during the “golden age” of Iraq’s educational system between the 1960s and the 1980s. According to the United Nations Educational, Scientific and Cultural Organization, before 1991, 100 percent of elementary school-age Iraqis were enrolled in school. The Iraqi system of higher education was internationally recognized. Following the first Gulf War, spending on education was cut sharply, resulting in the system’s decline. After 1990, spending on education dropped to 8 percent of the total government budget, and average spending per pupil fell to only \$47 per year.<sup>2</sup>

Despite interruptions in education following the 2003 invasion, education is currently a priority in al-Anbar. The 2009 survey found that very little has changed since 2008 in terms of education. Like most other Iraqis, the Anbari population is literate and generally well-educated. Most Anbaris have attended school, although some have not, and their reasons for not attending vary. Conservative local customs and traditions that discourage women from acquiring an education seem to have played a role in women’s access to education, whereas many men did not attend because they had to work or because they felt that they had all the education they need. The costs associated with attending school are rather high. According to both the 2008 and the 2009 surveys, households devote a significant portion of their spending to education. This suggests that education is likely very important to households.

### Literacy

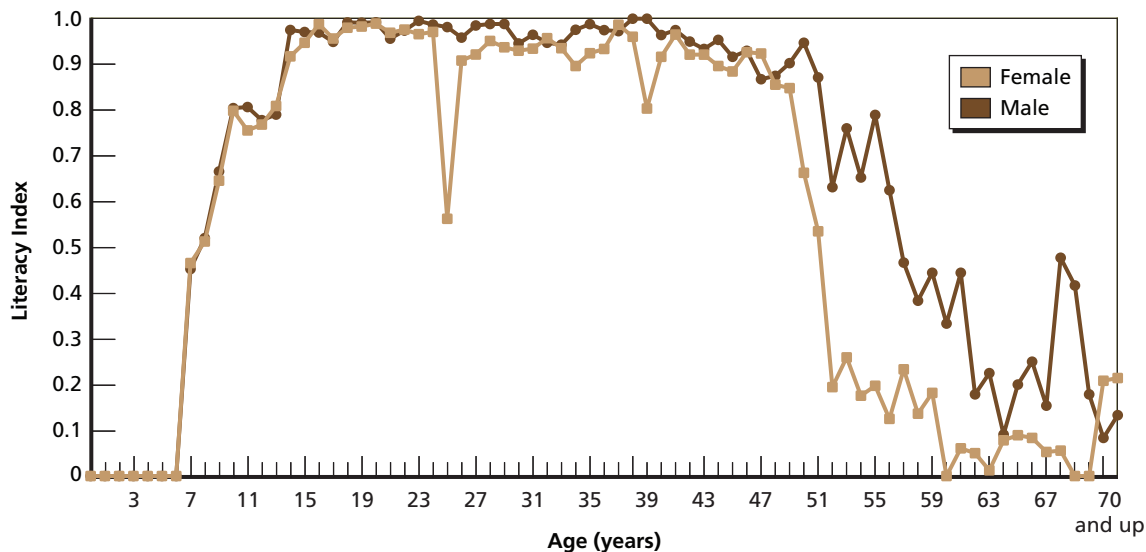
According to the 2009 survey results, educational attainments are highly correlated with age. Figure 7.1 tracks, by age and gender, an aggregated illiteracy index where 1 means that an individual can read and write easily and 0 means that an individual can neither read nor write. The age of 50 represents the breakpoint between widespread illiteracy and little or no education on one hand and literacy and schooling on the other. Virtually everyone between the ages of 15 and 50 is literate. It seems as though the widespread education of women did not begin until

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<sup>1</sup> “Iraq, Education, and Children of Conflict,” transcript of an April 8, 2008, conference at the Council on Foreign Relations, Federal News Service, 2008.

<sup>2</sup> “Iraq, Education, and Children of Conflict,” 2008.

**Figure 7.1**  
Literacy Index, by Age and Gender



RAND TR836-7.1

roughly 1968, the year the Ba'athists came to power. The education of men, however, seems to have been fairly widespread before 1968.

Large majorities (86 percent of men and 77 percent of women) of those over 20 years old say they can understand everyday written material or write a letter to friend. This is an improvement over 2004, when 75 percent of males age 15 and up and 52 percent of all females were fully literate. These figures contrast with the experiences of some U.S. military personnel involved in training Iraqi Security Forces recruits. A substantial share of such applicants fail basic literary tests. The difference may be due to both self-reporting and differing definitions of literacy.

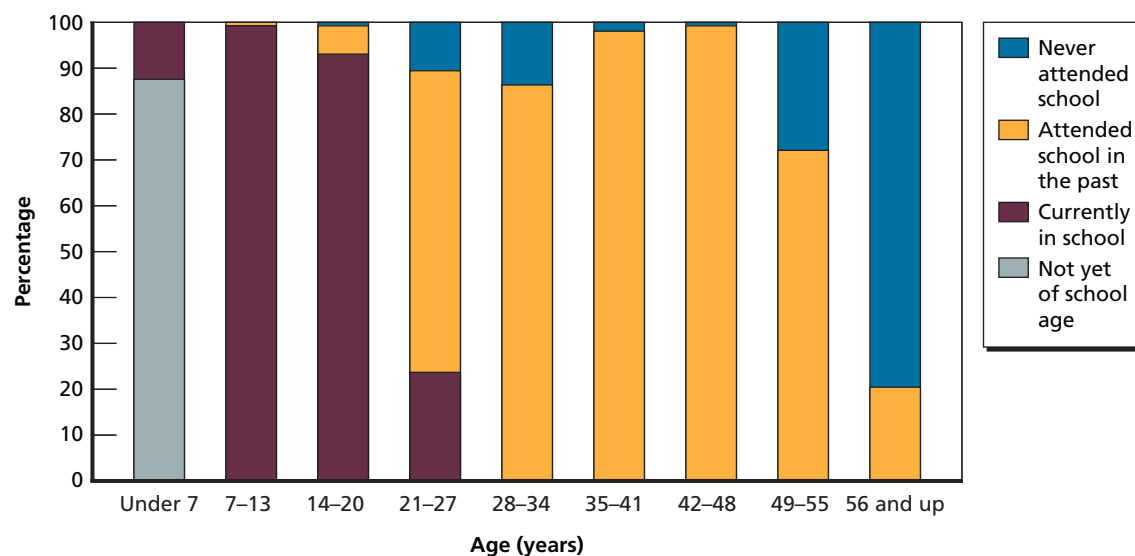
Figure 7.2, which depicts education rather than literacy, suggests that schooling of both genders is nearly universal between the ages of 7 and 22. Seven of every ten 22-year-olds are reported to be in school.

Figure 7.3 provides a closer snapshot of the school-age population by type of school attended. In general, Iraqi children stay within their grade in a very uniform fashion, graduating to the next level each year.

As Figure 7.4 indicates, both young men and young women ages 19 through 23 are reported to be in school, but the patterns are very different. Although 80 percent of men are reported to be in school, only 20 percent of them are committed to being full-time students; the rest are either working or looking for jobs. Among women, none of whom entered the labor force before the age of 23, two-thirds are in school, and only a very small number are looking for work.

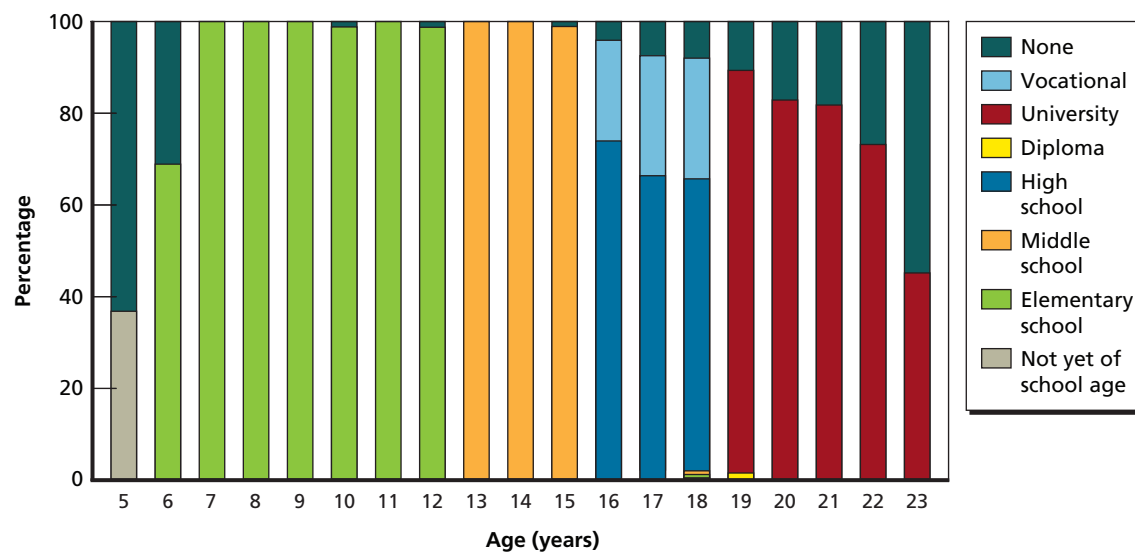
Respondents were queried about their schooling and the schooling of their household members. When people were asked why a particular household member was not attending or did not attend school, answers varied by the member's age and gender (see Figure 7.5). Among women, and particularly those over age 50, the dominant reason for not being in school is that the family believes that school is inappropriate for females. Poverty and a lack of interest are

**Figure 7.2**  
**Schooling, by Age**



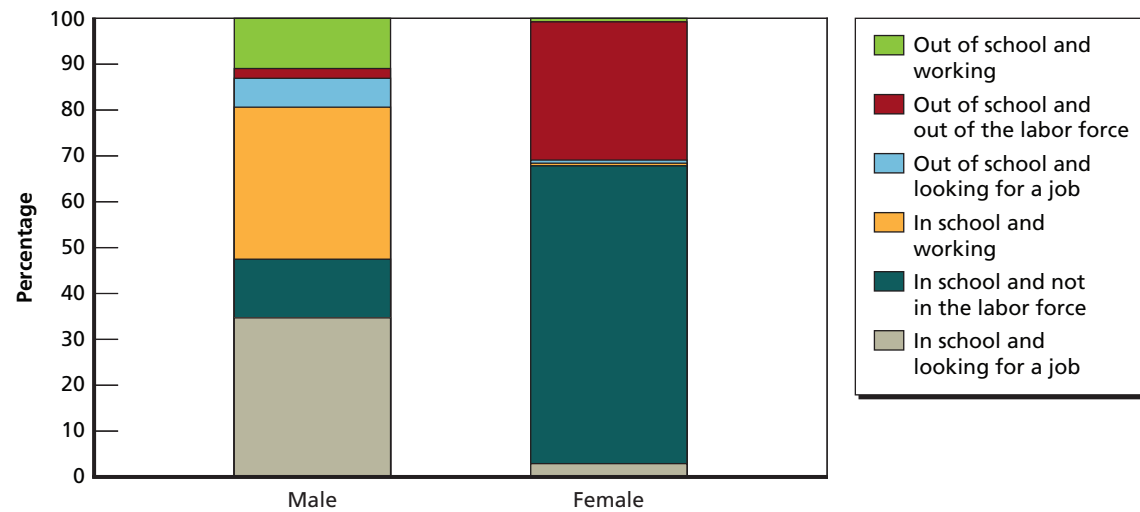
RAND TR836-7.2

**Figure 7.3**  
**Type of School Attended, by Age**



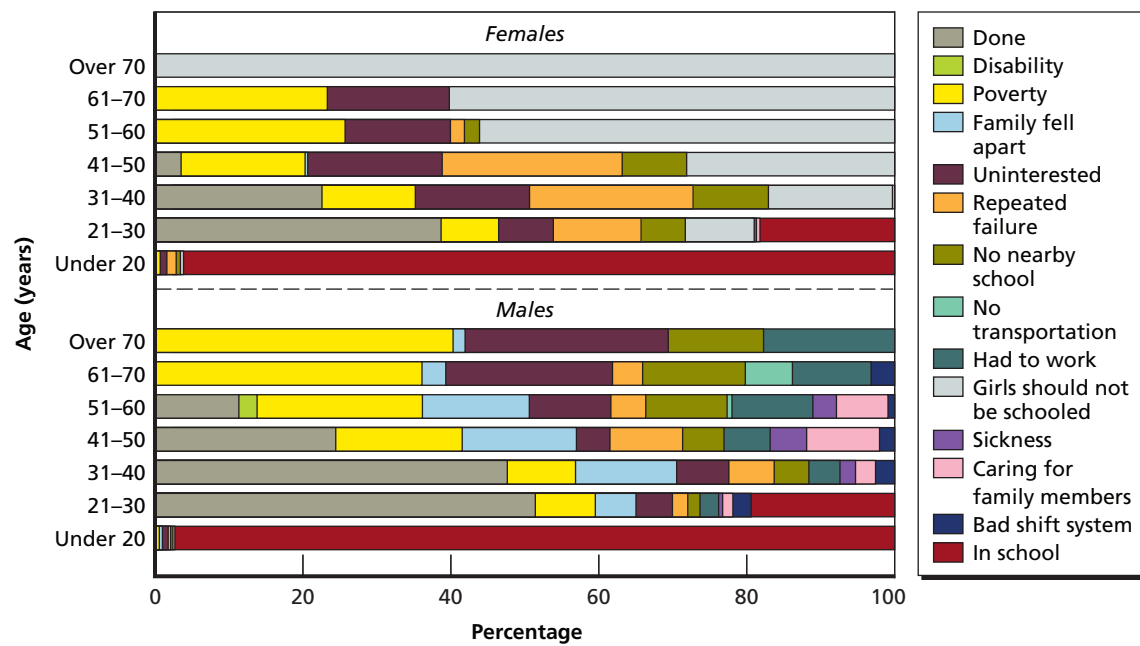
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**Figure 7.4**  
**Education and Employment Status, Ages 19–23, by Gender**



RAND TR836-7.4

**Figure 7.5**  
**Main Reason for Not Attending School, by Age**



RAND TR836-7.5

the other factors cited for the nonattendance of women over age 50, and repeated failure was cited for younger women. Men's answers are different: A larger percentage are satisfied with the amount of education they already received, and, among those who are not satisfied, reasons for not attending include poverty, a lack of interest, the need to work, and the difficulty of getting to school.

Urban-rural distinctions do not seem to be associated with educational attainment, as shown in Figure 7.6. This is consistent with findings in other survey areas, which suggest that, in general, urban-rural distinctions are irrelevant.

Some 386 individuals are currently engaged in vocational or technical training. Figure 7.7 shows the distribution of students by subject.

Household spending on education varies, as Figure 7.8 illustrates. Although a small fraction pay less than 150,000 dinars per student (roughly \$150), the bulk of respondents reported spending more, with 300,000–450,000 dinars (roughly \$300–\$450) representing a median figure. These amounts account for a substantial share of household expenditures. Spending patterns indicate that education is given high priority in Anbari families.

Not surprisingly, a household's expenditures on education vary with the age of the student (see Figure 7.9). It rises in step-like fashion with the transition between the elementary, intermediate, secondary, and university levels of education. This suggests that most of the money is spent on tuition rather than on uniforms, books, meals, or private lessons,<sup>3</sup> since the latter do not vary so sharply as students advance from one level of education to another.

## Summary

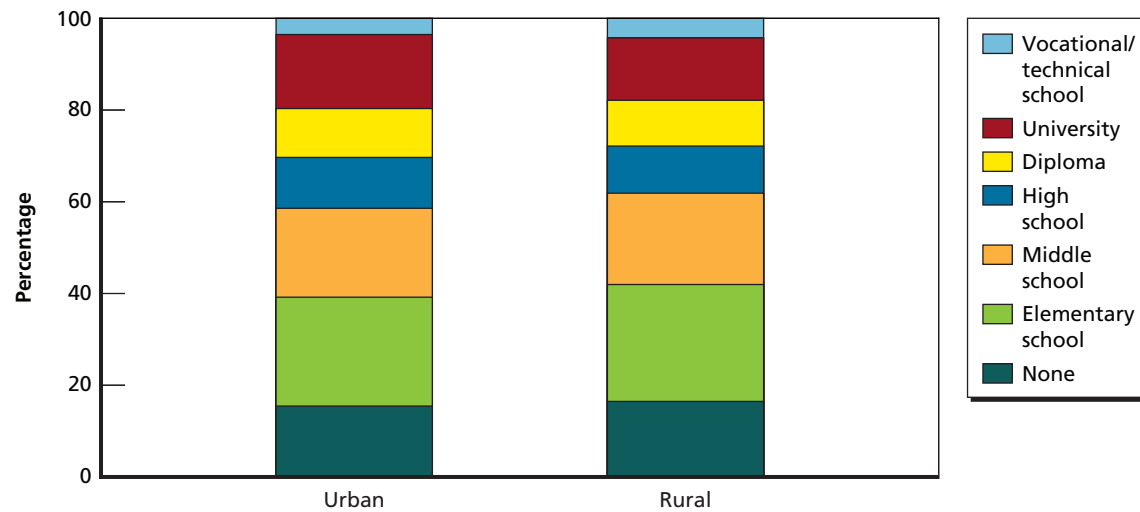
Anbaris take education seriously. Nearly 100 percent of everyone under age 50 is literate, and finishing high school is the norm. Households devote a significant percentage of their income to paying school fees. The costs associated with university education and households' inability to significantly defray these costs may explain why 80 percent of all male university students are either working or job-hunting. The lack of correlation between education level and earnings adds further questions.

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<sup>3</sup> Costs are hardly uniform within any one age group. For instance, to educate 14-year-olds, 14 percent of respondents spent an average of 150,000 dinars a year; 22 percent spent an average of 220,000 dinars per year; 33 percent spent an average of 250,000 dinars per year; and the rest spent an average of 300,000 dinars or more per year.

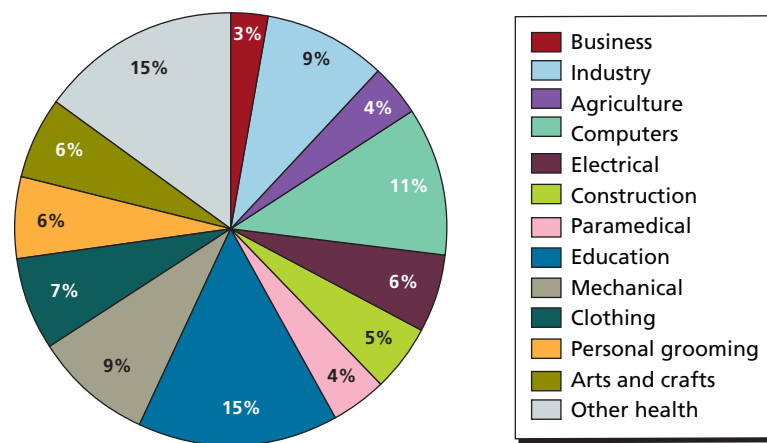


**Figure 7.6**  
Education Level of Household Heads, by Region



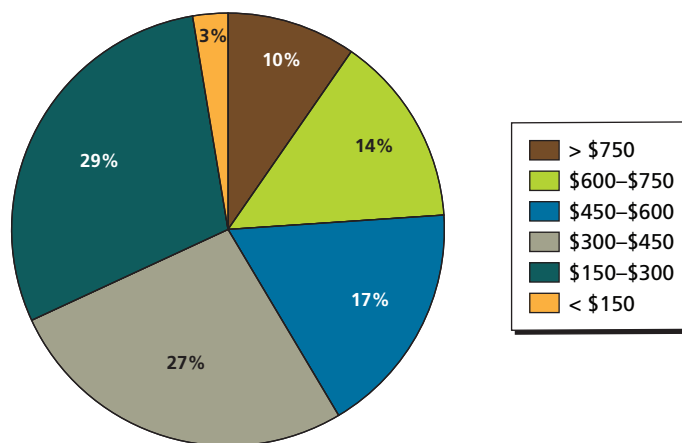
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**Figure 7.7**  
Vocational/Technical Training, by Subject



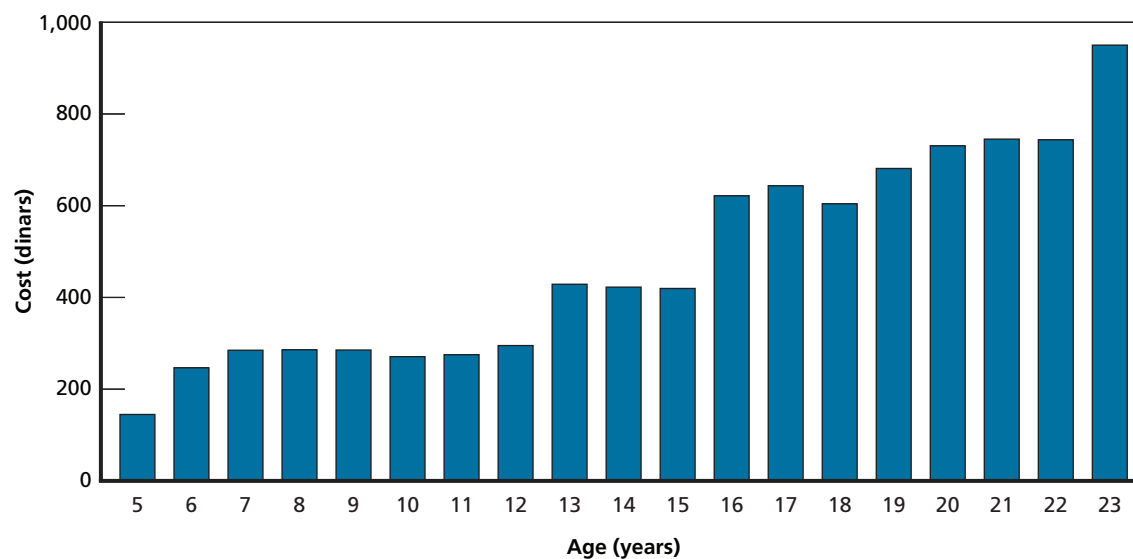
RAND TR836-7.7

**Figure 7.8**  
Annual Household Spending on Education per Student



RAND TR836-7.8

**Figure 7.9**  
Average Annual Cost of Education per Student, by Age



RAND TR836-7.9



## Housing

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As in 2008, most respondents in 2009 reported that their homes are in poor states of repair. Damage caused by the war following the 2003 invasion was the source of some of these problems, but a failure to take care of dwellings for financial or other reasons was also a cause. Repairs may be complicated by the fact that most Anbari homes are large and, therefore, that households living in dwellings that require substantial repairs may have to relocate during renovations, which may not be possible. Anbari homes are, for the most part, large, and households often include extended family members, as was true in 2008.

### Survey Results

Anbari homes and apartments tend to be larger than those in other countries where incomes are similar, but the family sizes are smaller, as noted in Chapter Four. As many as 72 percent of respondents said that their home contains five or more rooms. As shown in Figure 8.1, most households have two or three bedrooms, and the remaining rooms are common rooms used by the entire household. Compared with most homes in the United States, Anbari homes are crowded, with two or three people sleeping in each bedroom. This state of affairs has not changed since 2004, when “many families . . . [had] to put up with crowded living conditions to stay in houses they can afford.”<sup>1</sup>

Household size is correlated with the number of rooms in a home (see Figure 8.2). Larger families generally inhabit larger homes, but they also tend to have more people per room, compared with smaller families do. However, as household size approaches eight members, the number of bedrooms goes up very slowly. Overall, as families get larger, households generally become more crowded.<sup>2</sup>

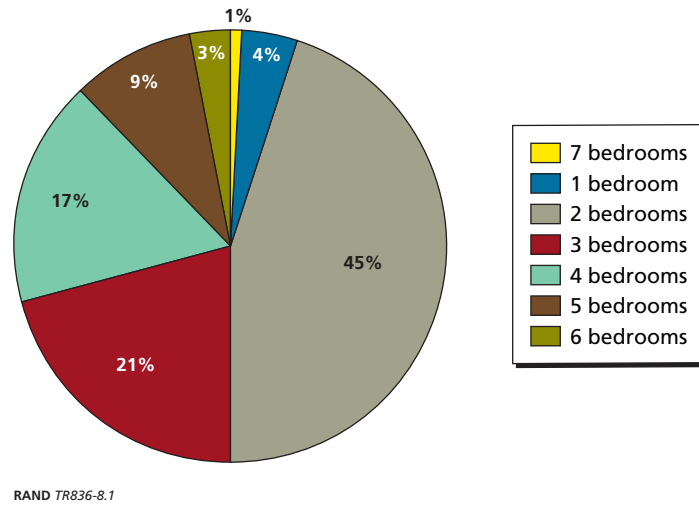
Roughly 20 percent of all households rent out rooms. Income from rents averages 280,000 dinars (roughly \$250) per month. Rents are paid either in cash or kind. In some instances, other members of the household pay rent, but, in most cases, rent is earned by renting space to people other than household members.

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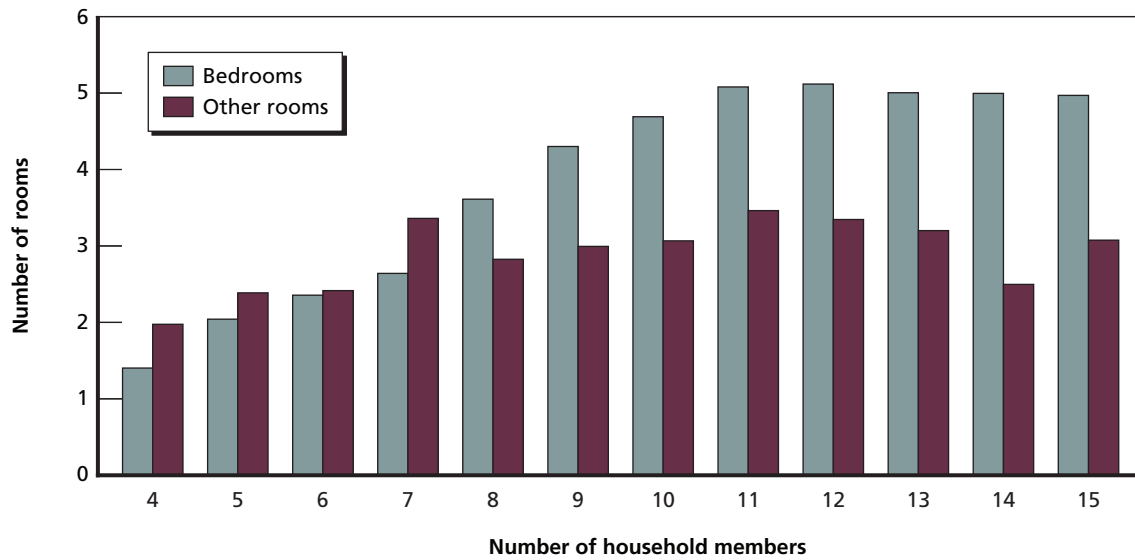
<sup>1</sup> Ministry of Planning and Development Cooperation, 2005. The Iraqi government also reported that 10 percent of Anbari households live in crowded conditions, which the UNDP defines as three or more persons per room. In 2009, there were no surveyed Anbari households reporting more than three people per room. Using a slightly different criterion—four or more persons per bedroom—shows that 4 percent of Anbari households are crowded.

<sup>2</sup> According to experts, the return of refugees since 2007 has led to rising prices for housing and, consequently, to more crowding.

**Figure 8.1**  
**Number of Bedrooms in the Household's Dwelling**



**Figure 8.2**  
**Average Number of Bedrooms and Other Rooms**



More than half of all households (57 percent) own their own house. (Technically, they own the land under the house.) Among the rest, 30 percent rent privately, 7 percent rent from the state, and 6 percent borrowed the land upon which the house sits. Among renters, 60 percent pay their own rent and the rest get help: 15 percent receive assistance from relatives in Iraq, 9 percent receive assistance from relatives outside Iraq, 9 percent receive assistance from religious institutions, 5 percent receive assistance from community leaders, and 2 percent receive assistance from their employer.

Most of al-Anbar's households (71 percent) reported that their homes are in disrepair. As Table 8.1 indicates, the most frequently cited problem is lack of maintenance (35 percent). However, 7 percent reported damage in whole or in part because of military activities. Looting (likely the result of war-related events) and other serious deficiencies were other commonly cited problems.

Table 8.2 indicates that, of those with serious damage, roughly a third are currently making repairs, a third intend to make repairs, and a third have no plans to make repairs soon. Importantly, this repair activity is reflected in the resurgence in construction in al-Anbar. The source of funds is varied: Half of the households are using their own money, and half are relying on borrowing or are seeking help from others, including family, local NGOs, and Islamic parties.

Every household reported using propane gas for cooking. Just over half of all households also reported using kerosene for cooking, and 15 percent also reported using electricity for cooking. All households use kerosene for heating. However, half also use small electric heaters, and 35 percent employ heaters that run on propane. These figures are similar to those reported in 2004, which found that 87 percent of Iraqi households used kerosene to heat their homes. However, electricity is a more important secondary source of heating in al-Anbar than elsewhere in Iraq.

## Summary

Anbaris have dwellings, but their houses are crowded, and most are in a state of disrepair. The effects of war and crime have exacerbated the extent of the disrepair, but most of the disrepair can be attributed to a lack of maintenance. With violence ebbing and the economy recovering, Anbaris are repairing their houses, but the process is likely to be a long one.

**Table 8.1**  
**Source of Damage to Homes**

Source of Damage	Percentage
Not applicable	29
Military	7
Looting	14
Lack of maintenance	35
Serious deficiencies	26

**Table 8.2**  
**Status of/Plans for Repairs**

Status of/Plans for Repairs	Percentage
Repairs are under way	
With my own money	10.7
With help from	
Family	3.3
Loans	2.8
An Iraqi NGO	1.3
My tribe	0.9
A community leader	0.8
An Islamic party	1.9
My religious group	0.4
I plan to make repairs	
With my own money	12.8
With help from	
Family	2.7
Loans	0.0
An Iraqi NGO	1.8
My tribe	0.5
A community leader	0.3
An Islamic party	1.8
My religious group	0.5
When I can arrange financing	3.2
I have no plans to make repairs	25.7
I have no need to make repairs	28.8

## Conclusion

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The goal of the RAND surveys was to assess changes in living conditions in al-Anbar over a two-year period with the aim of identifying assistance priorities in this once battle-ridden region. Differences in data-collection methods and in survey instruments do not allow for direct comparisons among all measures from one year to the next and therefore preclude making concrete recommendations. However, findings nonetheless suggest where assistance and attention might be focused and what observers might want to consider.

Anbar Province has clearly made substantial gains in security since 2008, and violence has diminished significantly. Findings from the 2009 survey (and from other efforts) indicate that, at least in the perception of the public, improvements may be due to enhanced law enforcement capacity, which itself is likely attributable to U.S. efforts to train Iraqi officers. As the U.S. withdraws its forces, the government of Iraq should continue to train officers. This will have the added effect of generating positive assessments of the central government.

Wages have continued to rise steadily, a sign that improvements in security have created a more permissive environment for revitalization of the economy. But, according to respondents, there needs to be more of a focus on widening business opportunities, which would benefit both investment and employment opportunities in the province. The war caused the core of al-Anbar's once-profitable business sector to flee to nearby Amman and Damascus. The lack of the rule of law and other security concerns naturally made the province less favorable for business. However, as stability improves, confidence may be restored. This will be critical for the development of a viable, robust business sector and of employment and economic growth. Given an unemployment rate of 20 percent, an improved business climate will be a much-welcomed development in al-Anbar.

Conditions in Baghdad appear to be improving, since most Anbaris who leave the province were more likely in 2009 to move to the capital—where there are more job opportunities—than to other areas of Iraq. This suggests that there will be more demands made on housing and infrastructure in Baghdad, and the government must be prepared to respond accordingly.

Progress in health care and infrastructure has not been so marked. Fighting and looting have destroyed much of the province's infrastructure, which had already been degraded before 2003 by previous conflicts and decades of neglect. Although there has been some improvement since the abatement of violence, the supplies of electricity and water are unstable, and, because these issues have remained unresolved since 2008, they are clearly in need of serious attention. Access to health care is also still a problem whose significant source seems, in the view of respondents, to be the dearth of health care professionals. Health care professionals who left the country after the 2003 invasion must be encouraged to return, or a new corps of health



care professionals must be trained (although the latter will take much time to accomplish). In absence of professionals, NGOs will be an important source of health care.

## Future Research

The 2008 and 2009 survey data offer numerous opportunities for future research, presenting a point of departure for a host of additional research topics that could contribute to the body of knowledge about postconflict countries in transition and countries in other stages of evolution. Potential topics include the following:

- *Changes in attitudes and indicators over time.* The advantage of collecting data over time is that doing so provides an opportunity to understand change. Future research might include the administration, over multiple years, of a survey of economic conditions. Such a survey could include a number of attitudinal questions that would evaluate the extent to which Anbari perceptions match objective indicators. For example, although the economy appears to be on the mend in al-Anbar, some of the population may not perceive this positive change. Information on levels of stress and personal satisfaction would be instructive for understanding whether objective improvements actually translate into both real satisfaction and, importantly, positive assessments of the Iraqi government and of government performance. Also of interest is the extent to which the sense of community and levels of emotional security have been restored in the province.
- *Comparative perspectives.* A similar survey could be administered in other contexts. For example, it would be worthwhile to use the RAND survey questions to assess economic conditions in other societies, including those recovering from and currently experiencing conflict. Afghanistan, Haiti, Pakistan, the West Bank, and Gaza are candidates. Even more insightful might be surveys that employ a comparative perspective to discover, for example, whether certain conditions produce similar or different results in different areas.
- *Population segments.* Exploring the effects of economic conditions on perceptions of certain segments of populations might yield useful data. For example, what, if any, are the unique effects on women, youth, refugees, or economic or political elites, and what are these groups' attitudes toward their circumstances and the government? If certain groups are more vulnerable, how might assistance be targeted to meet specific needs? One size does not fit all, so knowledge of how discrete groups are affected is worth pursuing.

## **RAND al-Anbar Standard of Living Survey: Year Two (May–June 2009)**

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### **Section HA: The Dwelling and Its Environment**

01. How many people live in the dwelling that is currently occupied by your household?

Number of rooms: \_\_\_\_

02. How many rooms do you have in your dwelling? Include glassed-in verandas, kitchens, and hallways. Do not include bathrooms and areas that are rented out.

Number of rooms: \_\_\_\_

03. How many bedrooms are in this dwelling?

Number of rooms: \_\_\_\_

04. What type of energy is used for cooking? (Circle all that apply.)

- 1. Gas
- 2. Kerosene
- 3. Electricity
- 4. Wood or charcoal
- 5. Dung
- 6. Other (specify): \_\_\_\_
- 98. Don't know
- 99. Not applicable

05. What type of energy is used for heating? (Circle all that apply.)

- 1. Gas
- 2. Kerosene
- 3. Electricity
- 4. Wood or charcoal
- 5. Dung
- 6. Other (specify): \_\_\_\_
- 98. Don't know
- 99. Not applicable

06. From which of the following sources do you receive electricity? (Circle all that apply.)

1. The local electrical network
2. A private generator
3. A shared generator
4. A solar panel
5. Other (specify): \_\_\_\_
6. Do not have electricity
98. Don't know
99. Not applicable

07. Does your current source of electricity give you a stable supply, or do you experience cutoffs a few times each month, weekly, or daily? Do cutoffs last less than 12 hours each day or more than 12 hours each day?

1. Stable supply
2. Cutoffs a few times each month
3. Weekly cutoffs
4. Daily cutoffs (for less than 12 hours each day)
5. Daily cutoffs (for more than 12 hours each day)
98. Don't know
99. Not applicable

08. Which type of toilet is currently working and being used by your household?

1. A pour-flush latrine connected to a public sewage network
2. A pour-flush latrine connected to a septic tank
3. A covered dry latrine
4. A service or bucket latrine from which waste is manually removed
5. An open dry latrine
6. Do not have a toilet
7. Other (specify): \_\_\_\_
98. Don't know
99. Not applicable

09. Thinking about your sewage network, would you say that you almost never have problems with your sewage, that you have frequent problems, or that your sewage system never works properly?

1. Almost never have problems
2. Frequent problems
3. Never works properly
98. Don't know
99. Not applicable

10. How does the household dispose of garbage? (Circle all that apply.)

1. Collected
2. Public container, open
3. Public container, closed
4. Burned

- 5. Dumped
- 6. Composted
- 7. Buried
- 8. Other ways (specify): \_\_\_\_
- 98. Don't know
- 99. Not applicable

11. What is the main source of water for the household? (Circle all that apply.)

- 1. Piped into dwelling
- 2. Piped into building but not into dwelling
- 3. Piped into yard/plot
- 4. Public tap
- 5. Open well in yard/plot
- 6. Open public well
- 7. Covered well/borehole in yard/plot
- 8. Covered public well/borehole
- 9. Tanker truck, vendor
- 10. Collected rainwater
- 11. Spring
- 12. River/stream
- 13. Pond/lake
- 14. Dam
- 15. Other (specify): \_\_\_\_
- 98. Don't know
- 99. Not applicable

12. How often does your main source of water supply function unreliably: daily, weekly, monthly, or almost never?

- 1. Daily
- 2. Weekly
- 3. Monthly
- 4. Almost never
- 98. Don't know
- 99. Not applicable

13. Is the main source of drinking water the same as the main source of water used for other purposes, like washing?

- 1. Yes
- 2. No
- 98. Don't know
- 99. Not applicable

14. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with the following statement: This household has no problem obtaining the drinking water we need because there is always a sufficient supply of adequate quality?

- 1. Strongly agree
- 2. Somewhat agree
- 3. Somewhat disagree
- 4. Strongly disagree
- 98. Don't know
- 99. Not applicable

15. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with the following statement: This household has no problem obtaining the water we need for other kinds of use because there is always an adequate supply?

- 1. Strongly agree
- 2. Somewhat agree
- 3. Somewhat disagree
- 4. Strongly disagree
- 98. Don't know
- 99. Not applicable

### **Section HU: Type of Neighborhood and Dwelling**

01. Has your dwelling been damaged as a result of any of the following reasons? (Circle all that apply.)

- 1. Military activities in the area
- 2. Looting in the area
- 3. Lack of maintenance
- 4. Other serious deficiencies
- 5. No
- 98. Don't know
- 99. Not applicable

02. Thinking about plans you may have for the house, have you already started to make repairs on your house, do you have definite plans to repair the house in the near future, or do you have no plans at all to repair your house?

- 1. Have already started to make repairs
- 2. Have definite plans to start in the near future
- 3. Have no plans at all to repair the house
- 98. Don't know
- 99. Not applicable

(If "Have no plans at all to repair the house," go to HU05.)

03. What will be the main source of financing for the repairs? (Circle only one.)

1. Own savings
2. Money and assistance from family
3. Borrowed money from a bank or another credit institution
4. Assistance from the government
5. Assistance from Iraqi NGOs
6. Assistance from international NGOs
7. Assistance from tribal organizations/members
8. Assistance from a community leader
9. Assistance from political parties (specify): \_\_\_\_
10. Assistance from religious institutions (specify): \_\_\_\_
11. Assistance from other local organizations in Iraq (specify): \_\_\_\_
12. It is not possible to finance repairs at this time
13. Other (specify): \_\_\_\_
98. Don't know
99. Not applicable

04. I am now going to read to you some locations to which you may travel as you live your daily life. As I read each location, please tell me how long it takes to get to each location with your usual means of transportation.

1. Elementary school: \_\_\_\_
2. Secondary school: \_\_\_\_
3. Hospital: \_\_\_\_
4. Primary health center/physician: \_\_\_\_
5. Pharmacy: \_\_\_\_
6. Police station: \_\_\_\_
7. Post office: \_\_\_\_
8. Place of worship: \_\_\_\_
9. Public distribution site: \_\_\_\_
98. Don't know
99. Not applicable

05. And what is the single most frequently used means of transportation that you use to access most of these services? (Circle only one.)

1. Walking
2. Public transportation
3. Taxi
4. Family car
5. Other (specify): \_\_\_\_
98. Don't know
99. Not applicable

**Subsection HT: Tenure and Imputed Rent**

01. Was this dwelling the household's residence in December 2007?

- 1. Yes
- 2. No
- 98. Don't know
- 99. Not applicable

(If "Yes," go to HT05.)

02. Why did the household move? (Circle all that apply.)

- 1. Too expensive to stay
- 2. The area was not secure
- 3. The dwelling was demolished
- 4. The dwelling was too small
- 5. The dwelling was damaged
- 6. Did not own the dwelling and wanted to own
- 7. The outdoor environment was not healthy
- 8. The indoor environment was not healthy
- 9. Was evicted
- 10. The dwelling was rented out to earn money
- 11. Work-related reasons
- 12. War or warlike events
- 13. Government orders
- 14. Other (specify)
- 98. Don't know
- 99. Not applicable

03. From which province did the household move? (This is an open-ended question. Precoded responses are provided. Circle only one.)

- 1. Baghdad
- 2. Basrah
- 3. Ninawa
- 4. Al-Sulaymaniyah
- 5. Dhi Qar
- 6. Arbil
- 7. Dahuk
- 8. Al-Ta'mim
- 9. Salah al-Din
- 10. Al-Anbar
- 11. Diyala
- 12. Karbala'
- 13. Babil
- 14. Wasit
- 15. Al-Najaf
- 16. Al-Qadusyyia
- 17. Al-Muthanna
- 19. Maysan

20. Another country or area (specify): \_\_\_\_

98. Don't know

99. Not applicable

04. On what basis does the household currently have a right to live on this land?

1. Owned by the household (even if it has debts)

2. Rented from the state

3. Rented from someone other than the state

4. Waqf

5. Land is borrowed with permission

6. Squatter/no right

98. Don't know

99. Not applicable

(If "Rented from the state" or "Rented from someone other than the state," go to HT06. If "Owned by household," "Waqf," "Land is borrowed with permission," or "Squatter/no right" go to HT09.)

05. On average, how much do you pay per month for this dwelling? You may answer the amount in Iraqi dinars or U.S. dollars.

1. Iraqi dinars: \_\_\_\_

2. U.S. dollars: \_\_\_\_

3. No rent

98. Don't know

99. Not applicable

06. Who pays the rent for your household? (Circle all that apply.)

1. Own household

2. A relative in Iraq

3. A relative abroad

4. An employer of someone in the household

5. A clan member/tribal organization (specify): \_\_\_\_

6. A domestic political party/organization (specify): \_\_\_\_

7. A domestic religious institution (specify): \_\_\_\_

8. A foreign humanitarian organization/group (specify): \_\_\_\_

9. A foreign political organization/group (specify): \_\_\_\_

10. Another nonprofit institution (nongovernmental) (specify): \_\_\_\_

11. The local government

12. A community leader

13. Other (friend, landlord, private company, etc.) (specify): \_\_\_\_

98. Don't know

99. Not applicable

07. From which person or institution do you rent or borrow? (Circle all that apply.)

1. A relative in Iraq

2. A relative abroad

3. An employer of someone in the household



- 4. A clan member/tribal organization (specify): \_\_\_\_
- 5. A domestic political party/organization (specify): \_\_\_\_
- 6. A domestic religious institution (specify): \_\_\_\_
- 7. A foreign humanitarian organization/group (specify): \_\_\_\_
- 8. A foreign political organization/group (specify): \_\_\_\_
- 9. Another nonprofit institution (nongovernmental) (specify): \_\_\_\_
- 10. The local government (not as employer)
- 11. A community leader
- 12. Other (friend, landlord, private company, etc.) (specify): \_\_\_\_
- 98. Don't know
- 99. Not applicable

08. Who owns the dwelling that you are living in right now? (Circle only one.)

- 1. I own this dwelling
- 2. A relative in Iraq
- 3. A relative abroad
- 4. An employer of someone in the household
- 5. A clan member/tribal organization (specify): \_\_\_\_
- 6. A domestic political party/organization (specify): \_\_\_\_
- 7. A domestic religious institution (specify): \_\_\_\_
- 8. A foreign humanitarian organization/group (specify): \_\_\_\_
- 9. A foreign political organization/group (specify): \_\_\_\_
- 10. Another nonprofit institution (nongovernmental) (specify): \_\_\_\_
- 11. The local government (not as employer): \_\_\_\_
- 12. A community leader
- 13. Other (friend, landlord, private company, etc.) (specify): \_\_\_\_
- 98. Don't know
- 99. Not applicable

09. How much income do you usually receive each month from renting out rooms in your dwelling to others? Rent may be received in-kind. This means that you may receive commodities, material items, or services instead of money. You may provide the amount in Iraqi dinars or U.S. dollars

- 1. Iraqi dinars: \_\_\_\_
- 2. U.S. dollars: \_\_\_\_
- 3. Do not rent rooms
- 98. Don't know
- 99. Not applicable

#### **Subsection PM: Satisfaction with Housing and Living Area**

For each of the following items, indicate whether you believe it is very satisfactory, fairly satisfactory, fairly unsatisfactory, or very unsatisfactory for your household.

01. Let us begin with your opinion of housing. How would you rate

- 1. Space/size: \_\_\_\_
- 2. Privacy: \_\_\_\_

- 3. Housing cost: \_\_\_\_
- 4. Exposure to noise: \_\_\_\_
- 5. Indoor environment: \_\_\_\_
- 98. Don't know
- 99. Not applicable

02. What about the outdoor environment, such as

- 1. Pollution and outdoor cleanliness: \_\_\_\_
- 2. Safety for children: \_\_\_\_
- 3. Traffic: \_\_\_\_
- 98. Don't know
- 99. Not applicable

03. How would you rate services, such as

- 1. Health services: \_\_\_\_
- 2. Public transport: \_\_\_\_
- 3. Water supply: \_\_\_\_
- 4. Water quality: \_\_\_\_
- 5. Shops and commerce: \_\_\_\_
- 98. Don't know
- 99. Not applicable

04. How would you rate work and business opportunities: good, fair, or poor? (Circle only one.)

- 1. Good
- 2. Fair
- 3. Poor
- 98. Don't know
- 99. Not applicable

05. What about the social environment, such as

- 1. Your neighbors
- 2. Distance to relatives
- 3. Distance to friends
- 98. Don't know
- 99. Not applicable

06. How many other households belonging to your clan, including those of cousins and distant relatives, live in your *hara*?

- 1. Number: \_\_\_\_
- 98. Don't know
- 99. Not applicable

07. Has your dwelling been looted since the war in 2003?

- 1. Yes
- 2. No

- 98. Don't know
- 99. Not applicable

08. Has anyone in your household been a victim of a crime or violent encounter in the last year? By *violent crime*, we mean a crime that took place during a robbery, a kidnapping, or other such event.

- 1. Yes
- 2. No
- 98. Don't know
- 99. Not applicable

09. In the last month, has anyone in this household been a victim of a crime or a violent encounter? By *violent crime*, we mean a crime that took place during a robbery, a kidnapping, or other such event.

- 1. Yes
- 2. No
- 98. Don't know
- 99. Not applicable

(If "No," go to PM12.)

10. What type of crime or violence did the household member most recently experience? (Circle only one. Choose the most-recent incident, if applicable.)

- 1. Armed robbery/theft
- 2. Kidnapping
- 3. Verbal threats
- 4. Murder
- 5. Assault/beatings
- 6. Shooting
- 7. Other (specify): \_\_\_\_
- 98. Don't know
- 99. Not applicable

11. What relative was murdered as a result of a violent crime?

- 1. Spouse
- 2. Son/daughter
- 3. Son-in-law/daughter-in-law
- 4. Sibling
- 5. Sibling of spouse
- 6. Nephew/niece
- 7. Parent
- 8. Parent of spouse
- 9. Grandchild
- 10. Second wife
- 11. Son/daughter of second wife
- 12. Sibling of second wife
- 13. Parent of second wife

- 14. Other relative
- 98. Don't know
- 99. Not applicable

12. If any of your household members were a victim of a crime or threatened, to whom would you turn to address the situation effectively? (Circle all that apply.)

- 1. Relatives, friends, and neighbors
- 2. The police
- 3. The Coalition forces
- 4. A private security company
- 5. A community leader
- 6. Religious leaders/organizations (specify): \_\_\_\_
- 7. Political parties/organizations (specify): \_\_\_\_
- 8. Tribal organizations/groups (specify): \_\_\_\_
- 9. Foreign humanitarian organizations (specify): \_\_\_\_
- 10. Domestic humanitarian organizations
- 11. Concerned Local Citizens' groups
- 12. Awakenings
- 13. Other neighborhood security organizations/groups (specify): \_\_\_\_
- 14. The head of the family
- 15. No one
- 16. Other (specify): \_\_\_\_
- 98. Don't know
- 99. Not applicable

## Section HR: Household Roster

List the number of people in the household: \_\_\_\_

01. What is . . . 's relationship to the household head?

- 1. Head
- 2. Spouse
- 3. Son/daughter
- 4. Son/daughter of spouse
- 5. Sibling
- 6. Sibling of spouse
- 7. Parent
- 8. Parent of spouse
- 9. Son-in-law/daughter-in-law
- 10. Grandchild
- 11. Other relative
- 12. Other relative of spouse
- 13. Servant
- 14. Other nonrelative
- 15. Second wife

16. Son/daughter of second wife

17. Sibling of second wife

18. Parent of second wife

02. Does . . . usually live in the household? Has the person been away for more than three months? Does the person usually live in the household but is temporarily away for less than three months? Does the person usually live in the household but is away for more than three months? Has the person been a visitor for less than three months? By *usually*, we mean that the person has stayed in the household for more than three months or that the person has joined the household more recently with the intent of staying for more than three months.

1. Usually lives in the household

2. Usually lives in the household but is temporarily away for less than three months

3. Has been away for more than three months

4. Has been a visitor for less than three months

98. Don't know

99. Not applicable

03. Is the household member currently living outside of the home with relatives, currently living outside of the home with friends, or imprisoned/detained?

1. Outside the home with relatives

2. Outside the home with friends

3. Imprisoned/detained

4. Elsewhere (specify): \_\_\_\_

98. Don't know

99. Not applicable

04. Is . . . a male or female?

1. Male

2. Female

05. How old is . . . ?

1. Age: \_\_\_\_ (If less than 1 year, mark 00.)

98. Don't know

99. Not applicable

06. Is . . . 's mother still alive?

1. Yes

2. No

98. Don't know

99. Not applicable

07. What was the mother's cause of death?

1. Natural causes

2. Murder

98. Don't know

99. Not applicable

08. Is . . . 's father still alive?

- 1. Yes
- 2. No
- 98. Don't know
- 99. Not applicable

09. What was the father's cause of death?

- 1. Natural causes
- 2. Murder
- 98. Don't know
- 99. Not applicable

10. What is . . . 's ethnicity?

- 1. Arab
- 2. Kurd
- 3. Turkoman
- 4. Assyrian
- 5. Armenian
- 6. Other (specify): \_\_\_\_
- 98. Don't know
- 99. Not applicable

11. What is . . . 's marital status?

- 1. Single, never married
- 2. Married
- 3. Widowed
- 4. Divorced
- 5. Separated
- 98. Don't know
- 99. Not applicable

12. How old was . . . at the time of the (first) marriage?

- 1. Age: \_\_\_\_
- 98. Don't know
- 99. Not applicable

## Section ED: Educational Status

01. In which grade, if any, is . . . currently enrolled? (Circle only one and record the grade in the space provided.)

- 1. Preschool
- 2. Elementary (grades 1–6), grade: \_\_\_\_
- 3. Intermediate (grades 1–3), grade: \_\_\_\_
- 4. Secondary (grades 1–3), grade: \_\_\_\_
- 5. Diploma after secondary (grades 1–2), grade: \_\_\_\_

6. University studies (grades 1–11), grade: \_\_\_\_
7. Vocational training (grades 1–3), grade: \_\_\_\_
8. Is not currently enrolled in school/never attended
9. Other (specify): \_\_\_\_
98. Don't know
99. Not applicable

(If "Not currently enrolled in school," go to ED02. For all other responses, go to ED03.)

02. What is the main reason why . . . is not currently attending school or has never attended school? (Circle only one.)

1. Below legal age
2. Finished education
3. Disability
4. Family poverty
5. Family disintegration
6. Not interested in school
7. Repeated failure
8. Bad treatment at school
9. School not available nearby
10. Transportation not available
11. Left school for marriage
12. Lost identification papers
13. No place at the school/school is overcrowded
14. Works in order to help the family economically
15. Concerns about safety traveling to and from school
16. Family does not want the girl to go to school
17. Sickness
18. Family displaced due to war
19. School closed down due to war
20. Caring for family members
21. Poor teacher quality
22. Inadequate or dangerous physical infrastructure at school
23. Inappropriate shift system
24. Other
98. Don't know
99. Not applicable

03. What is the most advanced level of education completed so far? (Circle only one and record the grade in the space provided.)

1. Preschool
2. Elementary (grades 1–6), grade: \_\_\_\_
3. Intermediate (grades 1–3), grade: \_\_\_\_
4. Secondary (grades 1–3), grade: \_\_\_\_
5. Vocational training/trade (grades 1–3), grade: \_\_\_\_
6. Diploma after secondary (grades 1–2), grade: \_\_\_\_
7. University studies (grades 1–11), grade: \_\_\_\_

8. Other (specify): \_\_\_\_

98. Don't know

99. Not applicable

(If "Vocational training/trade," go to ED04. For all other responses, go to ED05.)

04. What was the subject of the vocational training? (Circle all that apply.)

1. Business

2. Industry

3. Agriculture

4. Computer science

5. Electrical

6. Building

7. Paramedical

8. Education

9. Mechanical

10. Clothing

11. Personal grooming

12. Arts and crafts

13. Other (specify): \_\_\_\_

98. Don't know

99. Not applicable

05. Which type of school does this person now attend? (Circle only one.)

1. A government school in Iraq

2. A private school in Iraq

3. An NGO in Iraq

4. Several different schools in Iraq

5. A school abroad

6. Other

98. Don't know

99. Not applicable

06. What is the average cost per year for . . . 's education? Include fees and all other compulsory expenses, such as for uniforms, materials, meals, private lessons, and other. You may provide the amount in Iraqi dinars or U.S. dollars.

1. Iraqi dinars: \_\_\_\_

2. U.S. dollars: \_\_\_\_

98. Don't know

99. Not applicable

07. Can . . . read and understand everyday written material, such as a letter or newspaper, easily, with some difficulty, or not at all?

1. Easily

2. With some difficulty

3. Not at all

98. Don't know

99. Not applicable



08. Can . . . write, say, a letter to a friend easily, with some difficulty, or not at all?

1. Easily
2. With some difficulty
3. Not at all
98. Don't know
99. Not applicable

## Section HH: Health

01. When you or one of your family members is in need of medical attention, to which one person or place do you most often tend to turn to for help? (Circle only one.)

1. Family doctors/general practitioners
2. Specialty doctors (pediatricians, cardiologists, chronic-illness specialists, etc.)
3. Nurses/midwives
4. Pharmacists
5. Traditional healers
6. A religious person
7. A neighbor or other person in the community
8. Other
98. Don't know
99. Not applicable

02. How easy is it for you to get an appointment for the following types of health care services: very easy, fairly easy, fairly difficult, or very difficult? (Circle only one.)

1. Primary care
2. Preventive care (e.g., immunization)
3. Emergency care
4. Specialty care (pediatrics, cardiology, care for chronic or rare illness, etc.)
5. Dental care
98. Don't know
99. Not applicable

03. How easy is it for you to afford the costs of the following types of health care services: very easy, fairly easy, fairly difficult, or very difficult? (Circle only one.)

1. Primary care
2. Preventive care (e.g., immunization)
3. Emergency care
4. Specialty care (pediatrics, cardiology, care for chronic or rare illness, etc.)
5. Dental care
98. Don't know
99. Not applicable

04. Compared with 2005, would you say that it is generally easier or generally more difficult to access the following health care providers?

1. Nurses/midwives

2. Physicians/general practitioners
3. Dentists
4. Specialists (e.g., pediatricians, cardiologists, chronic-illness specialists)
5. Emergency medical personnel/paramedics
6. Traditional healers
7. Pharmacists
98. Don't know
99. Not applicable

05. At the present, which one of the institutions below most often provides health care for you and your family? (Circle only one.)

1. The government
2. A private institution/firm
3. NGOs in Iraq
4. International organizations
5. Other
98. Don't know
99. Not applicable

06. How do you mainly pay for your and your family's medical expenses? (Circle only one.)

1. Own savings
2. Money and assistance from family
3. Borrowed money from banks
4. Credit institutions
5. Assistance from the government
6. Assistance from international organizations
7. Assistance from Iraqi NGOs
8. Assistance from international NGOs
9. Assistance from tribal organizations/members
10. Assistance from a community leader
11. Assistance from political parties (specify): \_\_\_\_
12. Assistance from religious institutions (specify): \_\_\_\_
13. Other local organizations in Iraq (specify): \_\_\_\_
14. Other
98. Don't know
99. Not applicable

07. In your opinion, what are the three biggest problems with health care in Iraq today? (Circle up to three.)

1. Many medical professionals have moved outside of Iraq
2. Facilities are too far away
3. There are not enough qualified professionals
4. Facilities are in unsafe areas
5. There are not enough supplies or equipment
6. Discrimination against ethnic/religious groups
7. Unclean facilities

- 8. Limited services
- 9. Other (specify): \_\_\_\_
- 98. Don't know
- 99. Not applicable

### Section LS: Local Security

01. What would you say is the greatest threat to your neighborhood today? (Circle only one.)
- 1. Criminals
  - 2. Members of clan/ethnic/political/religious groups
  - 3. Former soldiers
  - 4. Iraqi police
  - 5. Coalition forces
  - 6. Local militias (specify): \_\_\_\_
  - 7. Other armed groups (specify): \_\_\_\_
  - 8. Other threat (specify): \_\_\_\_
  - 98. Don't know
  - 99. Not applicable
02. Compared to a year ago, has the security in your area generally improved, stayed the same, or worsened? (Circle only one.)
- 1. Improved
  - 2. Stayed the same
  - 3. Worsened
  - 4. Did not live in that place one year ago
  - 98. Don't know
  - 99. Not applicable

### Section LF: Labor Force

01. Focusing on just this past week (the last seven days), did . . . work for wages or any payment in kind, even if only for one hour?
- 1. Yes
  - 2. No
  - 98. Don't know
  - 99. Not applicable
02. During the past week, did . . . earn any money from the following?
- 1. Self-employment
  - 2. Working for a business not owned by a family member
  - 3. Agriculture or a farm belonging to someone outside the family
  - 4. A family-owned business
  - 98. Don't know
  - 99. Not applicable

03. I am now going to ask you some questions related to why someone in your household may have been temporarily absent from work last week. As I read each one, again please answer “yes” or “no.”

04. Did . . . have a job or business from which (s)he was temporarily absent?

1. Due to illness
2. Due to holidays
3. Due to temporary layoff
4. Due to studies /training with pay
5. Due to maternity leave with pay
6. Due to being a former soldier of the Iraqi Army and receiving money monthly
7. Because the place of work closed due to war damages
8. Because the place of work could not be accessed due to unexploded ordnance/mines
98. Don't know
99. Not applicable

05. Did . . . want to work last week?

1. Yes
2. No
98. Don't know
99. Not applicable

06. Thinking about the last month/four weeks, by what means did . . . look for work? (Circle all that apply.)

1. Asked friends or relatives
2. Applied directly to employers
3. Registered at a labor office
4. Responded to a newspaper advertisement
5. Tried to start own business
6. Tried to find work abroad
7. Contacted NGOs
8. Contacted the Coalition forces
9. Contacted the national government
10. Contacted the local government
11. Contacted the Iraqi Army
12. Other means (specify): \_\_\_\_
13. Did not look for work
98. Don't know
99. Not applicable

07. For how long time has . . . been actively looking for work?

Number of months: \_\_\_\_  
 Number of years: \_\_\_\_

08. What was the main reason why . . . did not look for work last week?

1. Contracted but has not started work yet
2. No jobs available—lost hope of finding a job
3. Student
4. Housewife/domestic work
5. Has independent means
6. Disabled or sick
7. Retired/pensioner
8. Parents or husband disagree/social restrictions
9. Other reasons (specify): \_\_\_\_
98. Don't know
99. Not applicable

09. For what type of employer does . . . work? (Circle only one.)

1. State-owned company
2. Local government
3. Private company or business
4. Cooperative
5. Joint sector
6. Iraqi Army
7. Family business
8. NGO
9. Private household
10. Other (specify): \_\_\_\_
98. Don't know
99. Not applicable

10. In what profession/occupation do you or did you work? (Circle only one. Record only the main job.)

1. Employer/manager of establishment with ten or more employees
2. Employer/manager of establishment with fewer than ten employees
3. Professional worker (e.g., lawyer, accountant, teacher)
4. Supervisory office worker: supervises others
5. Nonmanual office worker: does not supervise others
6. Foreman/supervisor
7. Skilled manual worker
8. Semiskilled manual worker
9. Unskilled manual worker
10. Farmer (has own farm)
11. Agricultural worker
12. Member of armed forces or security personnel
13. Never had a job
98. Don't know
99. Not applicable

11. In this current job, what is . . . 's employment status?
  1. A paid employee (receiving a wage or salary)
  2. A paid employee in family business
  3. An employer (with paid workers other than family members)
  4. Self-employed (or employs only family members)
  5. An unpaid worker in a family farm or business
  6. A trainee/worker without pay
  98. Don't know
  99. Not applicable
  
12. In this main job, how many total hours did . . . 's work last week?
  1. Number of hours: \_\_\_\_
  98. Don't know
  99. Not applicable
  
13. What is . . . 's total income from the main job last week?
  1. Iraqi dinars : \_\_\_\_
  2. U.S. dollars: \_\_\_\_
  98. Don't know
  99. Not applicable
  
14. In addition to the main job, how many, if any, additional job(s), either full-time or part-time, did . . . have last week? *Job* includes work in a family business or in the person's own self-employed business.
  1. Number of jobs: \_\_\_\_
  98. Don't know
  99. Not applicable
  
15. During the past week (last seven days), did . . . want to work more hours?
  1. Yes
  2. No
  98. Don't know
  99. Not applicable
  
16. What is the main reason or reasons that . . . is not working as much as (s)he wants? (Circle all that apply.)
  1. Lack of available work
  2. Not allowed or not permitted by employer
  3. Not allowed or not permitted by the government
  4. Salaries and working conditions in other jobs are not good enough
  5. Home duties/housework, looking after children, or similar
  6. Illness or disability
  7. Parents or husband disagree/social restrictions
  8. No work permit
  9. Other (specify): \_\_\_\_
  98. Don't know
  99. Not applicable

17. During the past month (four weeks), did . . . actively seek a job for more work?

- 1. Yes
- 2. No
- 98. Don't know
- 99. Not applicable

18. Thinking back to the end of December 2007, did . . . do any of the following?

- 1. Work for payment in cash or in kind, even if only for one hour?
- 2. Make any money or receive any payment in kind from self-employment?
- 3. Work for an enterprise or crop production belonging to a member of the household, even if not paid or for own consumption?
- 4. Become temporarily absent from any such work
- 98. Don't know
- 99. Not applicable

19. Was the main job the end of December 2007 the same as the main job last week?

- 1. Yes
- 2. No
- 98. Don't know
- 99. Not applicable

(If "No," go to LF24.)

20. Why has . . . changed his/her main job?

- 1. Was fired
- 2. Did not want to do the previous job
- 3. The working conditions
- 4. Transportation problems
- 5. The previous job did not give sufficient wages
- 6. Wages were no longer paid
- 7. The job disappeared after the 2003 invasion
- 8. Other (specify): \_\_\_\_
- 98. Don't know
- 99. Not applicable

21. During the end of December 2006, for the main or most important job, what type of business or organization was . . . 's employer?

- 1. Government company
- 2. Local government
- 3. Private company or business
- 4. Cooperative
- 5. Joint sector
- 6. Iraqi Army
- 7. Family business
- 8. NGO
- 9. Private household
- 10. Other (specify): \_\_\_\_

- 98. Don't know
- 99. Not applicable

22. During the end of December 2006, for whom did . . . work?

- 1. Government company
- 2. Local government
- 3. Private company or business
- 4. Cooperative
- 5. Joint sector
- 6. Iraqi Army
- 7. Family business
- 8. NGO
- 9. Private household
- 10. Other (specify): \_\_\_\_
- 98. Don't know
- 99. Not applicable

23. During the end of December 2006, what was . . . 's usual two weeks' income during this season from this main job?

- 1. Iraqi dinars: \_\_\_\_
- 2. U.S. dollars: \_\_\_\_
- 98. Don't know
- 99. Not applicable

24. How old was . . . when (s)he started working for the first time?

- 1. Age: \_\_\_\_
- 98. Don't know
- 99. Not applicable

## Section HE: Household Economy

01. Focusing on your wage earnings only, what is the total amount in 2008 and during the last two weeks that you received from wages, salary, commission payments, bonuses, or other cash income (including overtime allowances) from your employer?

02. Focusing on your wage earnings only, what is the total amount in 2008 and during the last two weeks that you received from in-kind payments (except free or subsidized housing) from your employer?

03. Focusing on your wage earnings only, what is the total amount in 2008 and during the last two weeks that you received from pay for seasonal labor on plantations (harvesting, weeding, etc.)?

04. Focusing on your wage earnings only, what is the total amount in 2008 and during the last two weeks that you received from other income received from your employer, such as free or subsidized housing?



05. What was your total income from household agricultural enterprises, including the sale of eggs, meat, and vegetables produced by the household?

06. What was your total income from home production for pay/sale, such as embroidery, carpet weaving, other handicrafts, or food preparation?

07. What was your total income from street vending, etc., of cigarettes and lottery coupons, and was the value of food or other items collected (or acquired through begging) for your own consumption?

08. What was the monetary value of the food you have consumed that you produced on your own (e.g., the food you produced from garden plots, fruit/olive trees, or ordinary agriculture; eggs or meat from your own production)?

09. What was your total income from providing informal taxi or other transport services or from carrying out repair, painting, plumbing, or other such work for payment, in cash or in kind?

10. What was your total other self-employment income?

11. I am now going to read you some sources inside Iraq that may provide assistance to you. As I read each one, please tell me whether the source offers any cash assistance, in-kind assistance, or some other type of assistance to you.

1. Banks or other credit institutions
2. Government
3. Iraqi NGOs
4. Tribal organizations/members
5. Political parties (specify): \_\_\_\_
6. Religious institutions (specify): \_\_\_\_
7. Other organizations in Iraq (specify): \_\_\_\_
8. Individuals in Iraq
9. Other gifts or financial transfers from within Iraq
10. Other source (please specify): \_\_\_\_
98. Don't know
99. Not applicable

12. I am now going to read to you some sources from abroad that may provide assistance to you. As I read each one, please tell me whether the source provides cash assistance, in-kind assistance, or some other type of assistance to you.

1. Banks and other credit institutions
2. Foreign organizations (specify): \_\_\_\_
3. Educational institutions
4. Professional associations
5. Individuals abroad
6. Other gifts or transfers from abroad

7. Other institutions abroad

98. Don't know

99. Not applicable

13. Do you receive income from retirement pensions from a former employer?

14. Do you receive income in cash or in kind from renting out land?

15. Do you receive income in cash or in kind from renting out buildings or rooms?

16. Do you receive income from insurance payments or other forms of compensation for damages?

17. Do you receive income from alimony, an inheritance, or a dowry?

18. Do you receive income from reselling gasoline or diesel fuel?

19. Do you receive income from the sale of tangible assets (e.g., cars, durables, jewelry) and other used items (e.g., furniture, clothes, household equipment)?

20. Do you receive income from the sale of land or buildings?

21. Do you receive income from another source of property income?

22. Altogether, how much did all members of your household earn or receive as gifts, in cash or in kind, in 2008?

23. Altogether, how much did all members of your household earn or receive as gifts, in cash or in kind, in 2007?

24. Does anybody in your household have a savings account at a bank or other formal credit institution?

1. Yes

2. No

98. Don't know

99. Not applicable

25. Does anybody in your household have savings in the form of gold or other precious metals?

1. Yes

2. No

98. Don't know

99. Not applicable

26. Does anyone in the household use *jam'iyya* to save money?

1. Yes

2. No

98. Don't know

99. Not applicable

27. There are some things people cannot afford, even if they would like them. Could your household afford these items or pay for these things, if you wanted them?

1. Keep your home adequately warm during winter
2. Keep your home adequately cool during summer
3. Pay for a week's holiday away from home
4. Replace worn-out furniture and appliances
5. Buy new, rather than secondhand, clothes
6. Eat meat, chicken, or fish at least three times a week
7. Pay for a wedding for a family member
8. Start a family or have another child
9. Provide adequate shelter for the household
10. Pay for a funeral
98. Don't know
99. Not applicable

28. Now, consider the total economic situation of your household. Please tell me which one of the following statements you think best describes your current situation? (Circle only one.)

1. We are among the well-off Iraqis in our country
2. We are not rich, but we manage to live well
3. We are neither rich nor poor
4. We are among the poor in Iraq
98. Don't know
99. Not applicable

29. If your household had a sudden need for 200,000 Iraqi dinars, would you be able to raise the money within a week using personal savings or with some assistance from others? Or is it unlikely that you would be able to raise the funds?

1. Would be able using personal savings
2. Would be able with some help from others
3. It is not likely the funds could be raised
98. Don't know
99. Not applicable

(If "Would be able using personal savings" or "Would be able with some help from others," go to HE30.)

30. To which one group, person, or institution, if any, would you go to in order to get the money? (Circle only one.)

1. Bank and other credit institutions
2. Neighbors
3. A community leader
4. Family
5. Tribal organizations/members
6. Political parties/organizations (specify): \_\_\_\_
7. Religious institutions (specify): \_\_\_\_
8. Other local organizations in Iraq (specify): \_\_\_\_
9. Foreign organization/groups (specify): \_\_\_\_

- 10. The Coalition
- 98. Don't know
- 99. Not applicable

31. Does anyone in your household currently receive fuel for free?

- 1. Yes
- 2. No
- 98. Don't know
- 99. Not applicable

32. From where did you receive the fuel?

- 1. Neighbors
- 2. A community leader
- 3. Family
- 4. Tribal organizations/members
- 5. Political parties/organizations (specify): \_\_\_\_
- 6. Religious institutions (specify): \_\_\_\_
- 7. Other local organizations in Iraq (specify): \_\_\_\_
- 8. Foreign organization/groups (specify): \_\_\_\_
- 9. The Coalition
- 98. Don't know
- 99. Not applicable

33. Does anyone in your household currently receive food rations?

- 1. Yes
- 2. No
- 98. Don't know
- 99. Not applicable

34. What do they do with the food rations?

- 1. Consume them within our household
- 2. Give them to other family members
- 3. Give them to friends, neighbors, or others in need
- 4. Sell them
- 98. Don't know
- 99. Not applicable

35. From whom do they receive the food rations? (Circle all that apply.)

- 1. The Iraqi Ministry of Trade
- 2. The Coalition
- 3. International NGOs
- 4. Iraqi religious NGOs
- 5. Other NGOs
- 6. Other sources (e.g., private organizations or groups) (specify): \_\_\_\_
- 98. Don't know
- 99. Not applicable

36. From where do they receive the food rations?

1. A local public distribution site
2. Other (please specify): \_\_\_\_
98. Don't know
99. Not applicable

37. When did you last receive food rations?

1. One week or less ago
2. Two weeks ago
3. One month ago
4. Two months ago
5. Three months ago
6. More than three months ago
98. Don't know
99. Not applicable

38. What would happen if you did not receive these rations? Would you buy the equivalent, eat less, or buy only some and eat less?

1. Buy the equivalent
2. Eat less
3. Buy only some and eat less
4. Other (specify): \_\_\_\_
98. Don't know
99. Not applicable

39. Does the household receive funds for medical assistance or medical supplies of any kind?

1. Yes
2. No
98. Don't know
99. Not applicable

(If "No," go to HE43.)

40. From where does your household receive funds or medical supplies?

1. The government
2. Neighbors
3. A community leader
4. Tribal organizations/members
5. Political parties/organizations (specify): \_\_\_\_
6. Assistance from religious institutions (specify): \_\_\_\_
7. Other local organizations in Iraq (specify): \_\_\_\_
8. Foreign organization/groups (specify): \_\_\_\_
9. The Coalition
98. Don't know
99. Not applicable

41. I am going to read a list of items. Please tell me whether your household or one of its members owns such an item, and whether it works. Please answer “yes” or “no.”

1. Refrigerator
2. Gas or electric stove (cooking)
3. Gas or electric oven (heating)
4. Kerosene or diesel oven (heating)
5. Electric fan
6. Washing machine (for clothes)
7. Vacuum cleaner
8. Sewing machine
9. Mix-master/electric blender
10. Radio/cassette player
11. Television set
12. Satellite dish
13. Video player
14. Photo camera
15. Video camera
16. Personal computer
17. Air conditioner
18. Car or truck
19. Motorbike
20. Bicycle
98. Don't know
99. Not applicable

42. Does the household have an ordinary phone with a land line?

1. Yes
2. No
98. Don't know
99. Not applicable

43. Is your ordinary (land line) phone connection stable?

1. Yes
2. No
98. Don't know
99. Not applicable

44. Does the household have a cellular phone?

1. Yes
2. No
98. Don't know
99. Not applicable

45. Is your cellular phone connection stable from your home?

1. Yes
2. No

- 98. Don't know
- 99. Not applicable

46. How do members of your household access the Internet, if at all—from a computer with an internet connection at home, from a computer with an internet connection at nearby family or friends, or from an internet café?

- 1. Computer with Internet connection at home
- 2. Computer with Internet connection at nearby family or friends
- 3. Nearby Internet café
- 4. Do not have access
- 5. Other (please specify): \_\_\_\_
- 98. Don't know
- 99. Not applicable

## Section HN: Migration and Relatives Abroad

01. Has any person who used to be a household member left the household since 2003 to settle down in another city, town or village, or another country? Please answer "yes" or "no." Do not include household members temporarily away for less than three months.

- 1. Yes
- 2. No
- 98. Don't know
- 99. Not applicable

02. When was the last time he/she left this household? Please tell me the month or year.

- Month: \_\_\_\_
- Year: \_\_\_\_
- 98. Don't know
- 99. Not applicable

03. Did . . . leave alone or did (s) he leave with his/her own household?

- 1. Alone
- 2. With his/her household
- 98. Don't know
- 99. Not applicable

04. What was the main reason for his/her leaving? (Circle only one.)

- 1. Work
- 2. Seeking work
- 3. Study/school
- 4. Married
- 5. Followed family
- 6. Place of origin/settled there
- 7. Health condition/need for care
- 8. Violent conditions

- 9. Ordered to move by government
- 10. Forced to flee for other reason
- 11. Other (specify): \_\_\_\_
- 98. Don't know
- 99. Not applicable

05. Where is . . . living now?

- 1. Baghdad
- 2. Al-Basrah
- 3. Ninawa
- 4. Al-Sulaymaniyah
- 5. Dhi Qar
- 6. Arbil
- 7. Dahuk
- 8. Al-Ta'mim
- 9. Salah al-Din
- 10. al-Anbar
- 11. Diyala
- 12. Karbala'
- 13. Babil
- 14. Wasit
- 15. Al-Najaf
- 16. Al-Qadusyyia
- 17. Al-Muthanna
- 18. Maysan
- 19. Jordan
- 20. Syria
- 21. Another country (please specify): \_\_\_\_
- 98. Don't know
- 99. Not applicable

**Subsection EW: Effects of War**

01. Has any person(s) who was a regular household member disappeared without explanation during the past two years? By *disappeared*, we mean the person was suddenly missing from the household due to war-related events.

- 1. Yes
- 2. No
- 98. Don't know
- 99. Not applicable

02. What was the relation of the missing person(s) to you?

- 1. Spouse
- 2. Son/daughter
- 3. Son-in-law/daughter-in-law
- 4. Sibling
- 5. Sibling of spouse



- 6. Nephew/niece
- 7. Parent
- 8. Parent of spouse
- 9. Grandchild
- 10. Second wife
- 11. Son/daughter of second wife
- 12. Sibling of second wife
- 13. Parent of second wife
- 14. Other relative
- 98. Don't know
- 99. Not applicable

03. What was . . . 's sex?

- 1. Male
- 2. Female
- 98. Don't know
- 99. Not applicable

04. How old was the person when he/she went missing?

- 1. Age: \_\_\_\_ (If less than 1 year, mark 00.)
- 98. Don't know
- 99. Not applicable

05. Has any person who was a regular household member been displaced from his or her home during the past two years? By *displaced*, we mean forced to leave the home due to violence or war-related events.

- 1. Yes
- 2. No
- 98. Don't know
- 99. Not applicable

06. What was the relation of the displaced person(s) to you?

- 1. Spouse
- 2. Son/daughter
- 3. Son-in-law/daughter-in-law
- 4. Sibling
- 5. Sibling of spouse
- 6. Nephew/niece
- 7. Parent
- 8. Parent of spouse
- 9. Grandchild
- 10. Second wife
- 11. Son/daughter of second wife
- 12. Parent of second wife
- 13. Sibling of second wife
- 14. Other relative

- 98. Don't know
- 99. Not applicable

07. What was . . . 's sex?

- 1. Male
- 2. Female
- 98. Don't know
- 99. Not applicable

08. How old was the person when he/she was displaced?

- 1. Age: \_\_\_\_ (If less than 1 year, mark 00.)
- 98. Don't know
- 99. Not applicable

09. Has any person who was a regular household member been arrested or detained during the past 24 months?

- 1. Yes
- 2. No
- 98. Don't know
- 99. Not applicable

10. What was the relation of the arrested or detained person(s) to you?

- 1. Spouse
- 2. Son/daughter
- 3. Son-in-law/daughter-in-law
- 4. Sibling
- 5. Sibling of spouse
- 6. Nephew/niece
- 7. Parent
- 8. Parent of spouse
- 9. Grandchild
- 10. Second wife
- 11. Son/daughter of second wife
- 12. Parent of second wife
- 13. Sibling of second wife
- 14. Other relative
- 98. Don't know
- 99. Not applicable

11. What was . . . 's sex?

- 1. Male
- 2. Female
- 98. Don't know
- 99. Not applicable

12. How old was the person when he/she was arrested or detained?

1. Age: \_\_\_\_ (If less than 1 year, mark 00.)

98. Don't know

99. Not applicable

13. Has any person who was a regular household member been killed during the past three years due to war-related events? We are asking about people who may have been killed due to war-related events, not accidents or suicides.

1. Yes

2. No

98. Don't know

99. Not applicable

(If "Yes," go to IO01.)

14. In what year and month did this happen?

Month: \_\_\_\_

Year: \_\_\_\_

15. What was the relation of the person(s) to you?

1. Spouse

2. Son/daughter

3. Son-in-law/daughter-in-law

4. Sibling

5. Sibling of spouse

6. Nephew/niece

7. Parent

8. Parent of spouse

9. Grandchild

10. Second wife

11. Son/daughter of second wife

12. Parent of second wife

13. Sibling of second wife

14. Other relative

98. Don't know

99. Not applicable

16. What was . . . 's sex?

1. Male

2. Female

98. Don't know

99. Not applicable

17. How old was the person when he/she was killed?

1. Age: \_\_\_\_ (If less than 1 year, mark 00.)

98. Don't know

99. Not applicable

## Section IO: Interviewer Observations

01. Type of dwelling
  1. Apartment building
  2. *Dar (housh)* (small traditional house)
  3. *Mushtaman* (first floor, separate entrance)
  4. Villa
  5. Hut/barrack
  6. Tent
  7. Other (specify): \_\_\_\_
02. What are the walls of the dwelling made of?
  1. Cut stone
  2. Block
  3. Brick
  4. Cut stone and cement
  5. Cement/concrete
  6. Clay and stone
  7. Asbestos/wood/zinc (iron plates)
  8. Wool/cloth/hair
  9. Bamboo
  10. Other (specify): \_\_\_\_
  98. Don't know
03. What is the state of the windows in the dwelling?
  1. Whole and unbroken
  2. Broken
  3. Have cloth material instead of plastic or glass
  4. There are no windows at all
04. What is the roof of the dwelling made of?
  1. Steel roof board
  2. Corrugated iron
  3. Bricks
  4. Concrete
  5. Mud and manure (*libn*)/rush (*qasab, bardi*)/thin branches
  6. Other (specify): \_\_\_\_
  98. Don't know
05. What kind of road is leading to the dwelling?
  1. Paved road
  2. Partly paved road
  3. Gravel road
  4. Dirt road
  5. Other (specify): \_\_\_\_

06. Can an ambulance get by road to the entrance of the dwelling/building?

- 1. Yes
- 2. No
- 98. Don't know

07. Can a fire engine get by road to the entrance of the dwelling/building?

- 1. Yes
- 2. No
- 98. Don't know

08. Are human or animal feces visible in the house or in the yard?

- 1. Yes
- 2. No
- 98. Don't know

09. Is there solid waste in the house or in the yard?

- 1. Yes
- 2. No
- 98. Don't know

10. Is there sewage in the yard?

- 1. Yes
- 2. No
- 98. Don't know

11. Is there garbage in the streets outside the dwelling?

- 1. Yes
- 2. No
- 98. Don't know

12. Is there sewage in the streets outside the dwelling?

- 1. Yes
- 2. No
- 98. Don't know

13. Is there smoke from burning garbage in the area?

- 1. Yes
- 2. No
- 98. Don't know

14. Are there any abandoned military vehicles in the immediate vicinity of the dwelling?

- 1. Yes
- 2. No
- 98. Don't know

15. Is the dwelling situated close to a weapon storage facility/dump?

- 1. Yes
- 2. No
- 98. Don't know

16. Is the dwelling located near the following? (Circle all that apply.)

- 1. Near a river bank (within 30 meters)
- 2. Near a railway (within 50 meters)
- 3. Near a highway (within 50 meters)
- 4. Near an industrial site (within 50 meters)
- 5. Under power lines
- 6. Near a large garbage dump (within 50 meters)
- 7. Near a steep slope (within 50 meters)
- 8. In the opening of or in a *wadi* (within 50 meters)
- 9. None of the above



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